REVISION HISTORY BG3R CHASSIS

MODEL

KV-AR34M81
KV-AR34N90

PART NO.: 9-872-340-01

NO.	SUFFIX	DATE	SUPPL. / CORR	DESCRIPTION
1	-01	2002/09	--	1st. Issue

Self Diagnosis
Supported model

SERVICE MANUAL

BG3R CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-AR34M81	RM-995	ME	SCC-U48V-A
KV-AR34N90	RM-996	Taiwan	SCC-U54F-A

MODEL	COMMANDER	DEST.	CHASSIS NO.

RM-996

RM-995

TRINITRON® COLOR TV

SONY®

SPECIFICATIONS
(KV-AR34M81)

				Note
Power requirements	110-240 V AC, 50/60 Hz			
Power consumption (W)	Indicated on the rear of the TV			
Television system	B/G, I, D/K, M			
Color system	PAL, PAL 60, SECAM, NTSC3.58, NTSC4.43			
Teletext language	English, Farsi (Persian), French			
Channel coverage				
B/G	VHF: E2 to E12 / UHF: E21 to E69 CATV: S01 to S03, S1 to S41			
I	UHF: B21 to B68 / CATV: S01 to S03, S1 to S41			
D/K	VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 / CATV: S01 to S03, S1 to S41, Z1 to Z39			
M	VHF: A2 to A13 / UHF: A14 to A79 CATV: A-8 to A-2, A to W+4, W+6 to W+84			
(Antenna)	75-ohm external terminal			
Audio output (Speaker)	8W + 8W			
Number of terminal				
Video	Input: 4*	Output: 1	* Three input lines available	Phono jacks; 1 Vp-p, 75 ohms
♪ Audio	Input: 4*	Output: 1	* Three input lines available	Phono jacks; 500 mVrms
(S Video)	Input : 2			Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p, 75 ohms
(Component Video)	Input : 1			Phono jacks: Y: 1 Vp-p, 75 ohms sync negative C_B: 0.7 Vp-p, 75 ohms C_R: 0.7 Vp-p, 75 ohms Audio: 500mVrms
(Headphone)	Output: 1			Stereo minijack
Picture tube	34			
Tube size (cm)	86			Measured diagonally
Screen size (cm)	80			Measured diagonally
Dimension (w/h/d,mm)	896 × 686 × 569			
Mass (kg)	79			

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SPECIFICATIONS
(KV-AR34N90)

				Note
Power requirements	110 V AC, 60 .Hz			
Power consumption (W)	Indicated on the rear of the TV			
Television system	M			
Color system	NTSC3.58, PAL*, PAL 60*, SECAM*, NTSC4.43*			* AV IN only
Stereo/Bilingual System	MTS			
Channel coverage	VHF : 2 to 13 / UHF : 14 to 69 / CATV : 1 to 125			
(Antenna)	75-ohm external terminal			
Audio output (Speaker)	8W + 8W			
Number of terminal				
Video	Input: 4*	Output: 1	* Three input lines available	Phono jacks; 1 Vp-p, 75 ohms
Audio	Input: 4*	Output: 1	* Three input lines available	Phono jacks; 500 mVrms
(S Video)	Input : 2			Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p, 75 ohms
Component Video (DVD) IN	Input : 1			Phono jacks: Y: 1 Vp-p, 75 ohms sync negative C_B: 0.7 Vp-p, 75 ohms C_R: 0.7 Vp-p, 75 ohms Audio: 500mVrms
(Headphone)	Output: 1			Stereo minijack
Picture tube	34			
Tube size	859 mm			Measured diagonally
Screen size	803 mm			Measured diagonally
Dimension (w/h/d,mm)	896 × 686 × 569			
Mass (kg)	79 kg			

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

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TABLE OF CONTENTS

Section	Title	Page
SELF DIAGNOSTIC FUNCTION		5
1. DISASSEMBLY		
1-1.	Rear Cover Removal	8
1-2.	Speaker Removal	8
1-3.	Chassis Assy Removal	8
1-4.	F Board Removal	8
1-5.	Service Position	8
1-6	HV Cap Block, PWB Holder and DH Board Removal	8
1-7.	Terminal Bracket and J Board Removal	9
1-8.	D2 Board Removal	9
1-9.	H1 and H2 Boards Removal	9
1-10.	B1 and V1 Boards Removal	9
1-11.	A and B10 Boards Removal	9
1-12.	Picture Tube Removal	10
2. ADVANCE OPERATION		
2-1.	"RESET" Function	11
3. SET-UP ADJUSTMENTS		
3-1.	Beam Landing	12
3-2.	Convergence	13
3-3.	Focus Adjustment	15
3-4.	G2 (SCREEN) and White Balance Adjustment	16
4. CIRCUIT ADJUSTMENTS		
4-1.	Adjustment With Commander	17
4-2.	Adjustment Method	17
4-3.	Adjustment for Non Digital Texture Enhancer (DTE) Model	29
4-4.	Adjustment for Digital Texture Enhancer (DTE) Model	29
4-5.	Display Position Adjustment	30
4-6.	Deflection Adjustment	30
4-7.	H-Trapezoid Adjustment	31
4-8.	A Board Adjustment After IC003 (MEMORY) Replacement	31
4-9.	Picture Distortion Adjustment	32
5. DIAGRAMS		
5-1.	Block Diagram	33
5-2.	Circuit Board Location	35
5-3.	Schematic Diagram	36
	(1) C6 and J Boards Schematic Diagrams	37
	(2) A Board Schematic Diagram	39
	(3) D2 Board Schematic Diagram	43
	(4) H1 and F Boards Schematic Diagrams	45
	(5) B10 Board Schematic Diagram	47
	(6) V1 Board Schematic Diagram	49
	(7) B1 Board Schematic Diagram	51
	(8) DH Board Schematic Diagram	52
	(9) H2 Board Schematic Diagram	53
	(10) VM1 Board Schematic Diagram	54
5-4.	Voltage List and Waveforms	56
5-5.	Printed Wiring Boards and Parts Location	61
5-6.	Semiconductors	68
6. EXPLODED VIEWS		
6-1.	Speaker Bracket	70
6-2.	Chassis	71
6-3.	Picture Tube	72
7. ELECTRICAL PARTS LIST		73
OPERATING INSTRUCTIONS		

SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

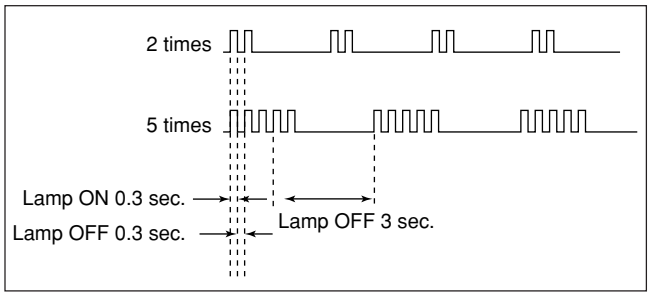
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F4601 (F)	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
• +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	• H.OUT Q511 is shorted. (A board) • Q701, Q702, Q703 is shorted (C6 board) • -13V is not supplied. (A board) • IC 503 faulty (A board)	• Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~225	• G2 is improperly adjusted. (Note 2) • CRT problem. • R(Q703), G(Q702) or B(Q701) out is faulty (C6 board) • IC301 is faulty. (A board) • No connection A board to C6 board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset	—	101:00 or 101:001~225	• Discharge CRT (C6 Board) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

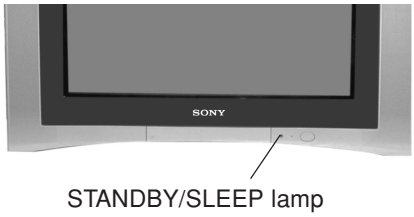
Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.
The symptom that is diagnosed first by the microcontroller is displayed on the screen.
Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.
* R(Q703), G(Q702) or B(Q701) out is faulty (C6 board).

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



Diagnostic Item	Flash Count*
+B overcurrent/overvoltage Vertical deflection stopped	2 times
White balance failure	5 times

* One flash count is not used for self-diagnostic.



3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

4. SELF-DIAGNOSTIC SCREEN DIPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

[To Bring Up Screen Test]

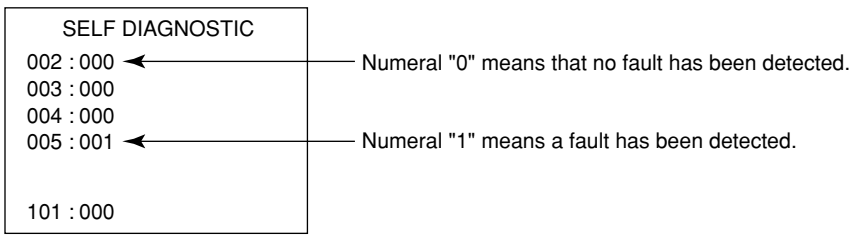
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON

⇧

Note that this differs from entering the service mode (mode volume +).

Self-Diagnosis screen display


SELF DIAGNOSTIC
002 : 000
003 : 000
004 : 000
005 : 001
101 : 000
Numeral "0" means that no fault has been detected.
Numeral "1" means a fault has been detected.

5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]

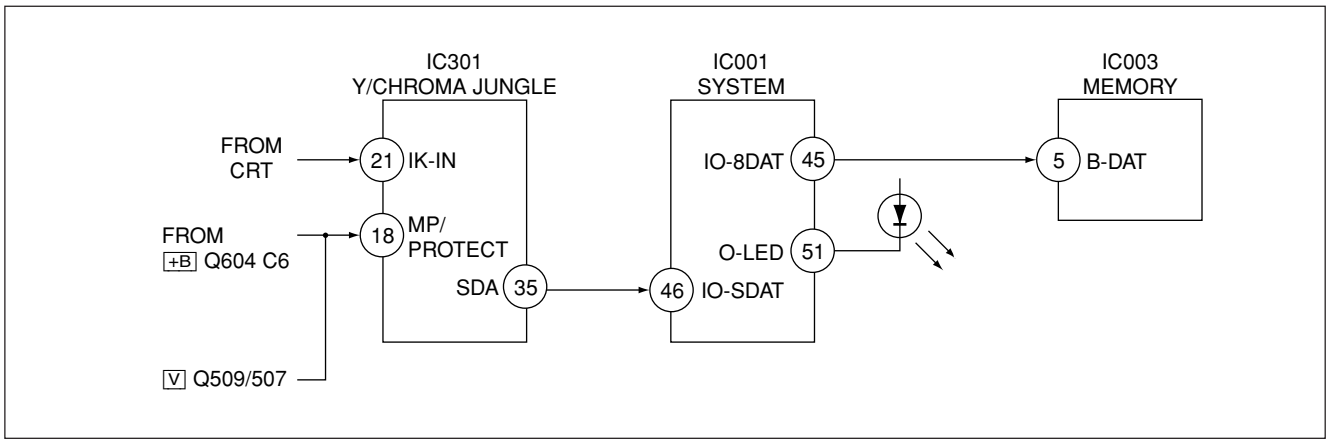
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel [8] ➡ 0

[Quitting Self-diagnostic screen]

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

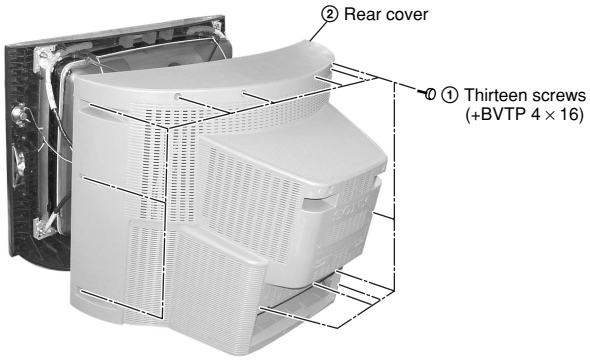
6. SELF-DIANOSTIC CIRCUIT



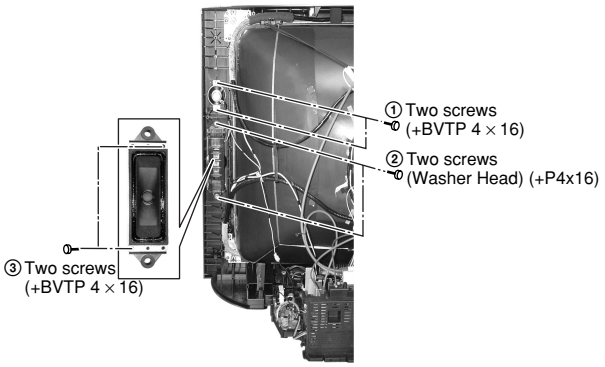
+B overcurrent (OCP)	Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.
Vertical deflection stopped	Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply.
Vertical deflection overcurrent	Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.
White balance failure	If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture. * (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

SECTION 1
DISASSEMBLY

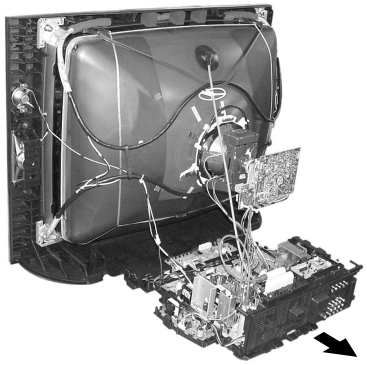
1-1. REAR COVER REMOVAL



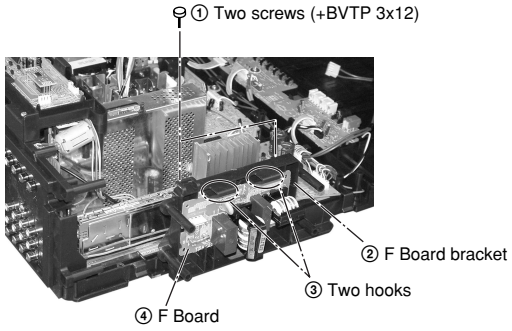
1-2. SPEAKER REMOVAL



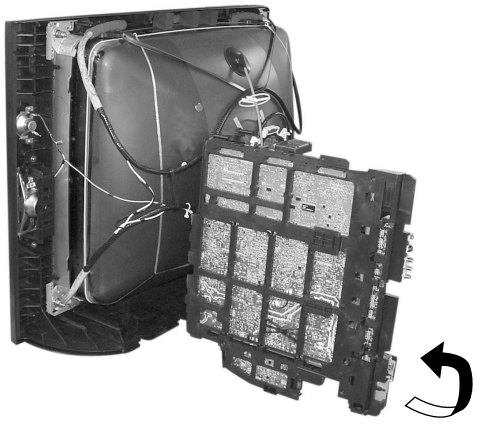
1-3. CHASSIS ASSY REMOVAL



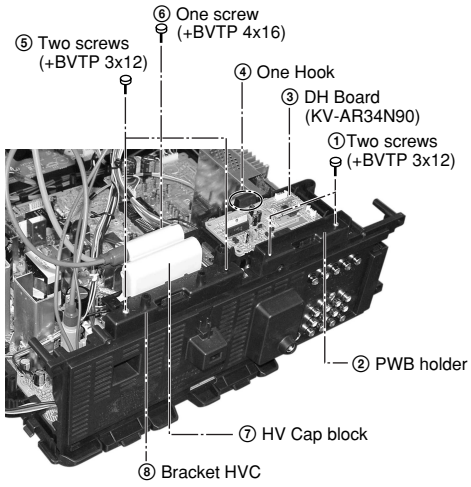
1-4. F BOARD REMOVAL



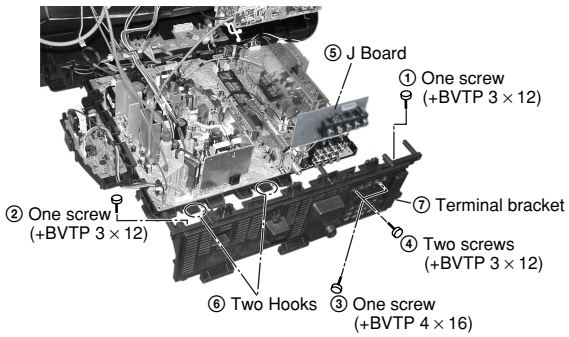
1-5. SERVICE POSITION



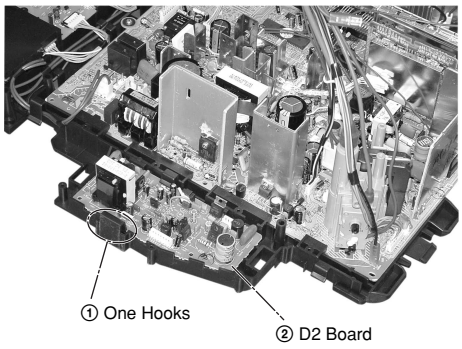
1-6. HV CAP BLOCK, PWB HOLDER AND DH BOARD REMOVAL



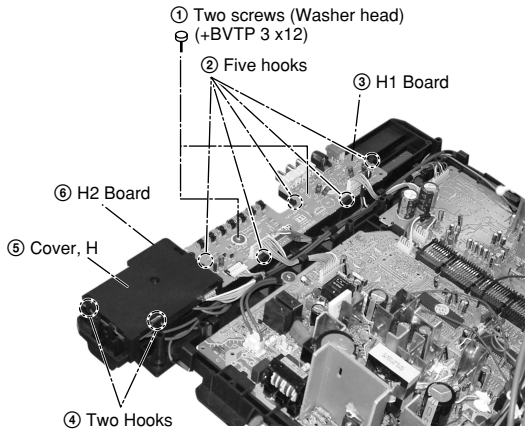
1-7. TERMINAL BRACKET AND J BOARD REMOVAL



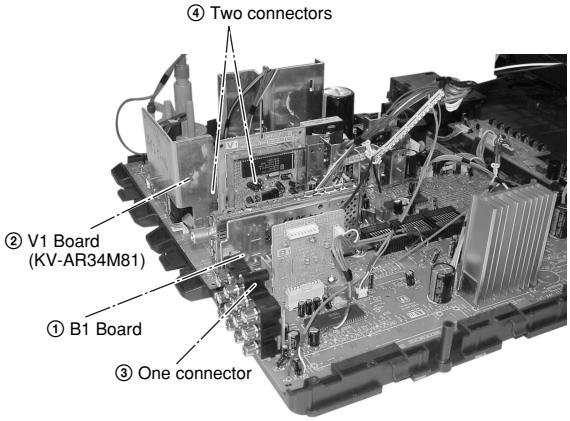
1-8. D2 BOARD REMOVAL



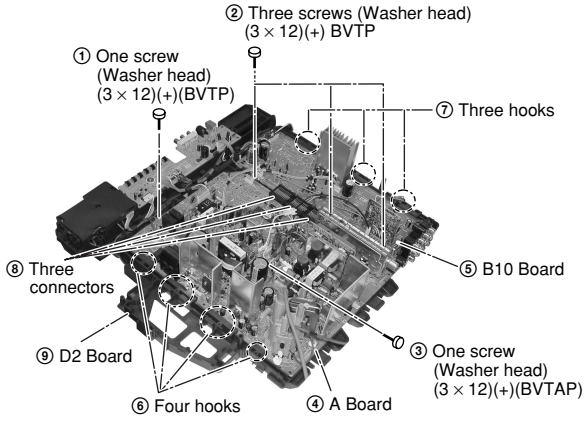
1-9. H1 AND H2 BOARDS REMOVAL



1-10. B1 AND V1 BOARDS REMOVAL



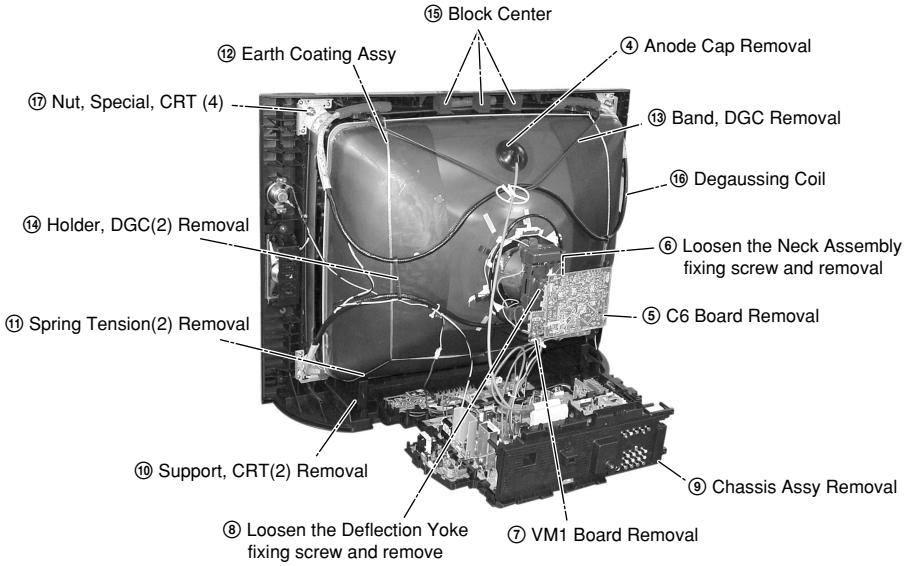
1-11. A AND B10 BOARDS REMOVAL


② Three screws (Washer head) (3 × 12)(+) BVTP
① One screw (Washer head) (3 × 12)(+)(BVTP)
⑦ Three hooks
⑧ Three connectors
⑤ B10 Board
⑨ D2 Board
③ One screw (Washer head) (3 × 12)(+)(BVTAP)
⑥ Four hooks
④ A Board

1-12. PICTURE TUBE REMOVAL

Note:
- Please make sure the TV set is not in standing position before removing necessary CRT support located on bottom right and left.

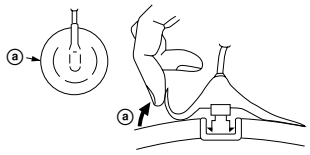
1) Place the TV set with the CRT face down on a cushion jig.
2) Removal the rear cover.
3) Unplug all interconnecting leads from the Deflection yoke, Neck assy, Degaussing Coil and CRT grounding strap.


⑮ Block Center
⑫ Earth Coating Assy
④ Anode Cap Removal
⑰ Nut, Special, CRT (4)
⑬ Band, DGC Removal
⑯ Degaussing Coil
⑭ Holder, DGC(2) Removal
⑥ Loosen the Neck Assembly fixing screw and removal
⑤ C6 Board Removal
⑪ Spring Tension(2) Removal
⑩ Support, CRT(2) Removal
⑨ Chassis Assy Removal
⑧ Loosen the Deflection Yoke fixing screw and remove
⑦ VM1 Board Removal

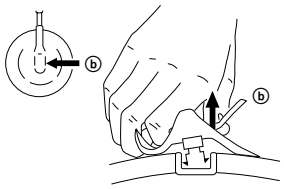
• REMOVAL OF ANODE-CAP

Note:
- After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

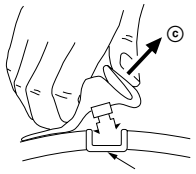
• REMOVING PROCEDURES



① **Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.**



② **Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.**

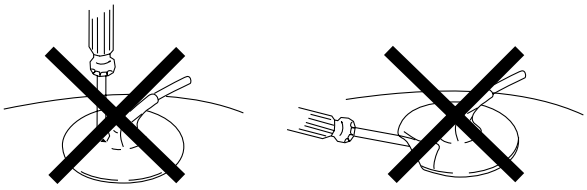


anode button

③ **When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.**

• HOW TO HANDLE AN ANODE-CAP

① **Do not damage the surface of anode-caps with sharp shaped objects.**
② **Do not press the rubber too hard so as not to damage the inside of anode-cap.**
A metal fitting called the shatter-hook terminal is built into the rubber.
③ **Do not turn the foot of rubber over too hard.**
The shatter-hook terminal will stick out or damage the rubber.



SECTION 2
ADVANCE OPERATION

2-1. "RESET" FUNCTION

1. Purpose

If a customer faces some setting problem that cannot be solved, using the "RESET" function some items will be reset to its original setting (shipment condition)

2. How to Operate

The way to access to the "RESET" Function:-

a) By pressing "MENU" button or "SELECT" button (for non-menu models) on the Front Key Input and hold it down for 5 seconds.

3. Subsequent of Operation

Sequential to the resetting operation (either methods being used in No. 2), TV set would shut down once and automatically turn on again. The power-off duration is expected to be about 500msec. An OSD message, "RESET" tentatively will be displayed for 10 sec after IK status gets stable.
As a result, some items will be reset to an initial condition (shipment condition) wheareas some other remains at the last selection by user.

Items that remains at the last selection by user

Channel No., PIC rotation, OSD Language, Skip

Reset Items

Video input	RF	Antenna sensitivity	OFF (Not used for this models)
Volume	30	Antenna sensitivity	HIGH* (Not used for this models)
Picture mode	DYNAMIC	Stereo mode	STEREO
DTE	ON (Not used for this models)	Bilingual mode	MAIN* (Not used for this models)
Sound mode	DYNAMIC	High-deviation mode	AUTO (Not used for this models)
Surround mode	OFF	Child lock	OFF*
Favourite CH mode	AUTO (Not used for this models)	Wide mode	OFF
Multi Picture (PIP)	OFF (Not used for this models)	Game mode	OFF (Not used for this models)
PIP position	Bottom Right (Not used for this models)	Sleep timer	OFF
		Wake-up timer	OFF
OSD recall	(Not used for this model)	Sound muting	OFF
Antenna sensitivity	OFF (Not used for this models)		

*= only when in RF mode

SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order :
1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.
1. Pattern Generator
2. Degausser
3. Oscilloscope

. . . . . .

Preparation :
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Fig3-2.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side. (See Figures 3-1 through 3-4.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-2.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Figure 3-5.)

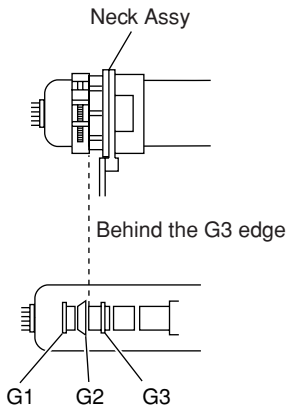


Fig. 3-1

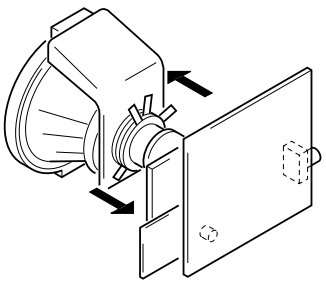


Fig. 3-2

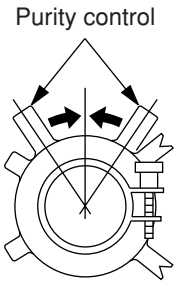


Fig. 3-3

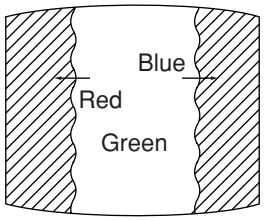


Fig. 3-4

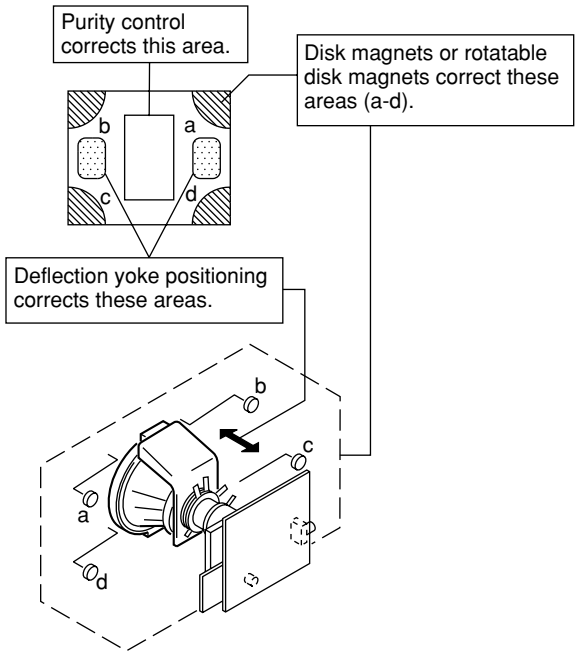


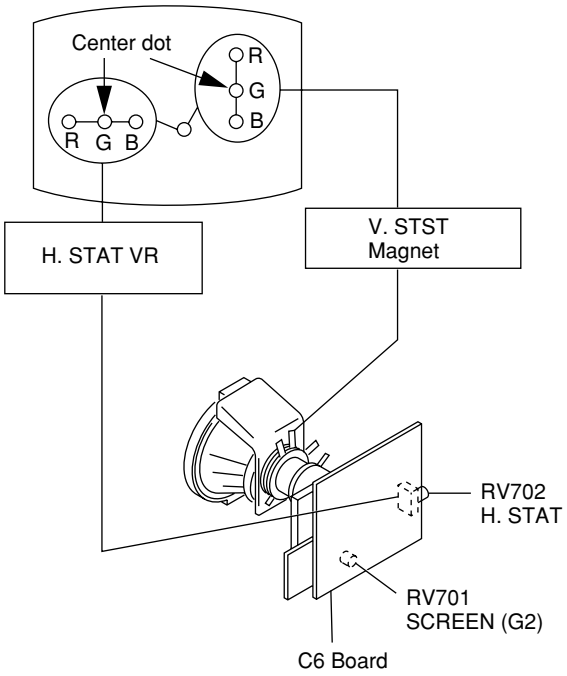
Fig. 3-5

3-2. CONVERGENCE

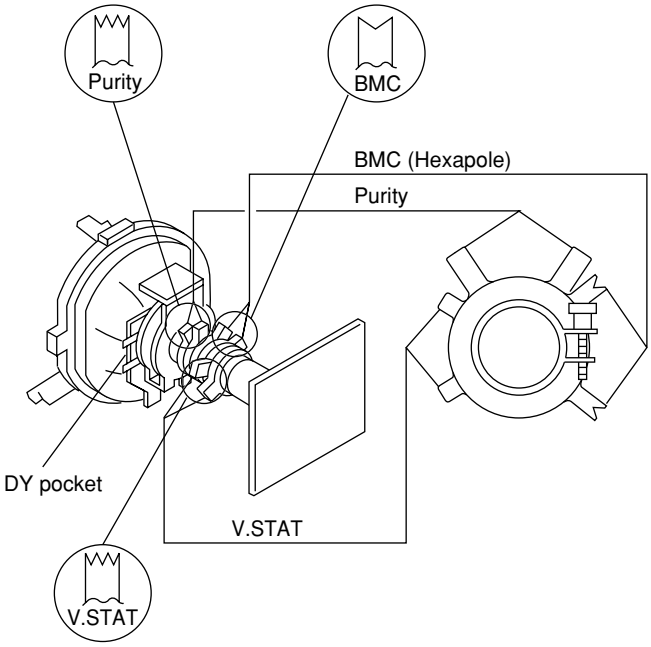
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Receive dot/hatch signal.
- Pic mode: Personal (Pic 90%, Brightness 50%, Colour 50 %, Hue 50%, Sharpness 50%).

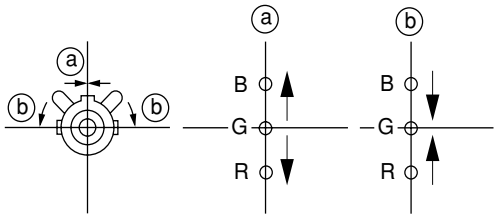
(1) Horizontal and Vertical Static Convergence



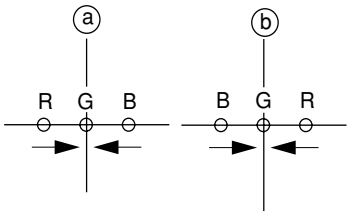
1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)



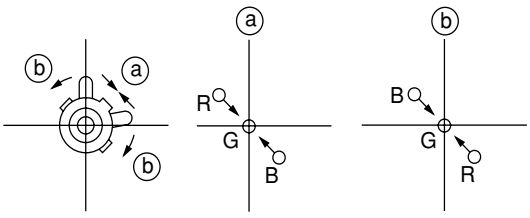
① V. STAT



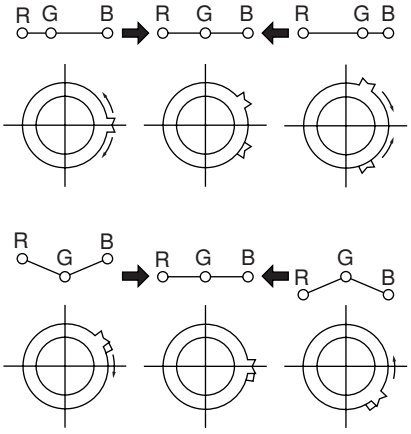
② H. STAT VR

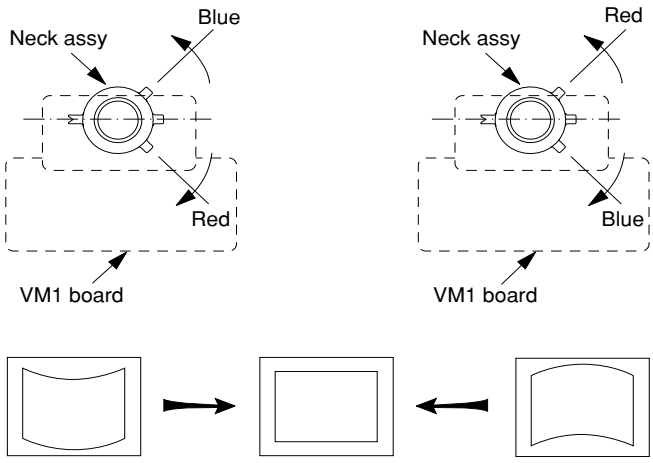


③



④ BMC (Hexapole) Magnet.
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.





⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .
2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.

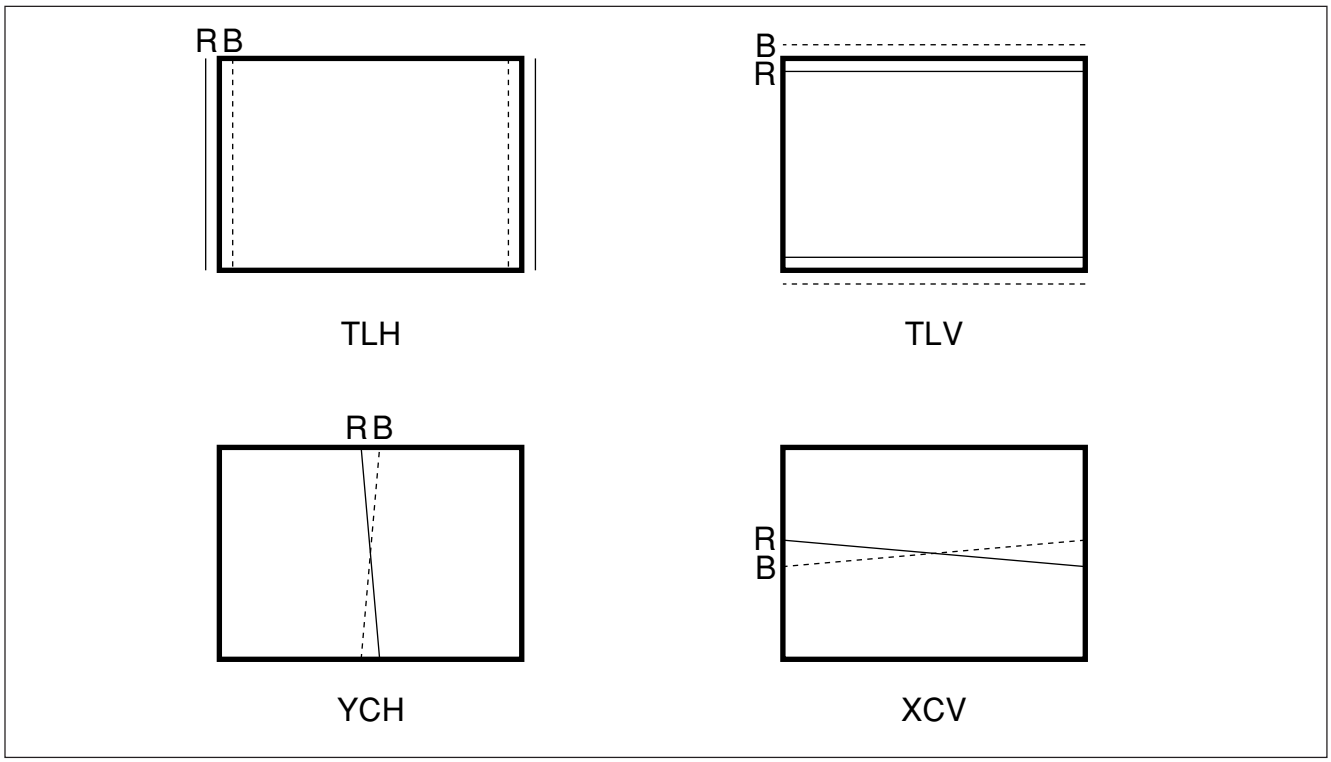
Note

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

(2) Dynamic Convergence Adjustment

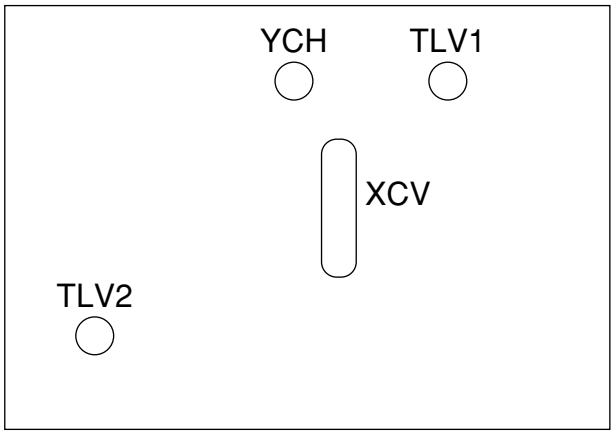
Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence

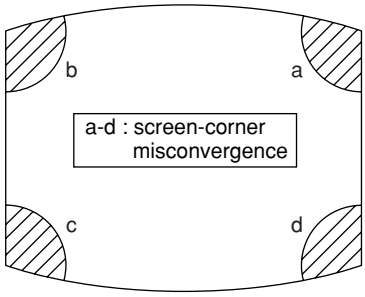


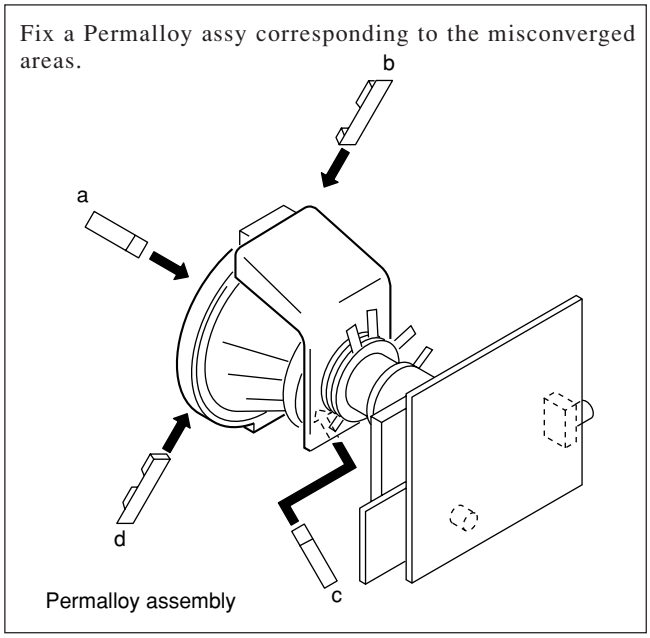
TLV	Rotate	TLV-2	VOL (29”, 34”) on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

ON DY:



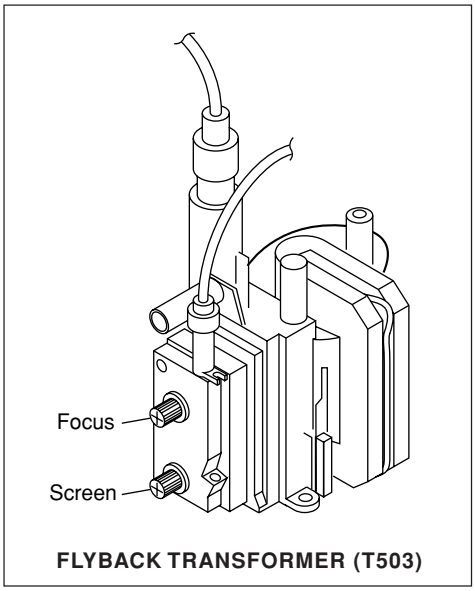
(3) Screen-corner Convergence





3-3. FOCUS ADJUSTMENT

FOCUS adjustment should be completed before W/B adjustment.



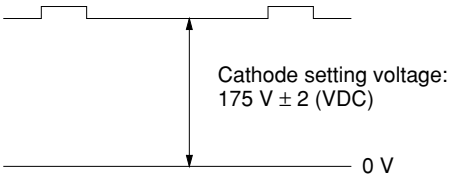
FLYBACK TRANSFORMER (T503)

1. Receive digital monoscope pattern.
2. Set "Picture Mode" to "Standard".
3. Set S2801 to mechanical center position.
4. Adjust focus VR so that the center of the screen becomes just focus.
5. Adjust S2801 when corner focus is unbalance is right and left.
6. Change the receiving signal to white pattern blue back.
7. Confirm Magenta ring is not noticable. Incase magneta ring is obvious, reset S2801 to mechanical center position and then adjust FOCUS VR to balance between MAGENTA RING and FOCUS.

3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C6 board cathode to the oscilloscope.
4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

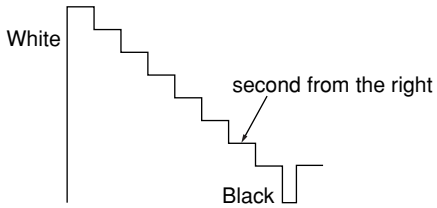


2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the PICTURE to minimum.
4) Select WHB 04 "GCT" and WHB 05 "BCT" with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select WHB 01 "GDR" and WHB 02 "BDR" with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black to white from the pattern generator.
3) BRIGHTNESS .... 50%.
   PICTURE ..... MINIMUM
4) Select WHB 07 "SBR" with [1] and [4], and adjust WHB 07 "SBR" level with [3] and [6] so that the second stripe from the right is dimly lit.



SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments to this model can be performed using the supplied Remote Commander RM-995 and RM-996.

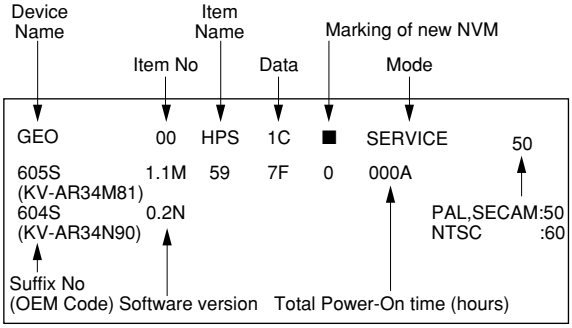
a. ENTERING SERVICE MODE

With the unit on standby

→ [DISPLAY] → [5] → [VOL (+)] → [POWER]

This operation sequence puts the unit into service mode.

The screen display is :



b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press [POWER] button on the commander), then press [POWER] button again, hereupon it becomes TV mode.

c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN), to select the adjustment.
4) Press [MUTING] button to indicate WRITE on the screen.
5) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

[1], [4]	Select the adjustment item.
↓	
[3], [6]	Raise/lower the data value.
↓	
[MUTING]	Writes.
↓	
[0]	Executes the writing.

[7], [0]	All the data becomes the values in memory.
[8], [0]	All user control goes to the standard state.
[5], [0]	Service data initialization (Be sure not to use usually.)
[MUTING], [0]	Write 50Hz adjustment data to 60Hz, or vice versa.
[2], [0]	Copy and write all data.

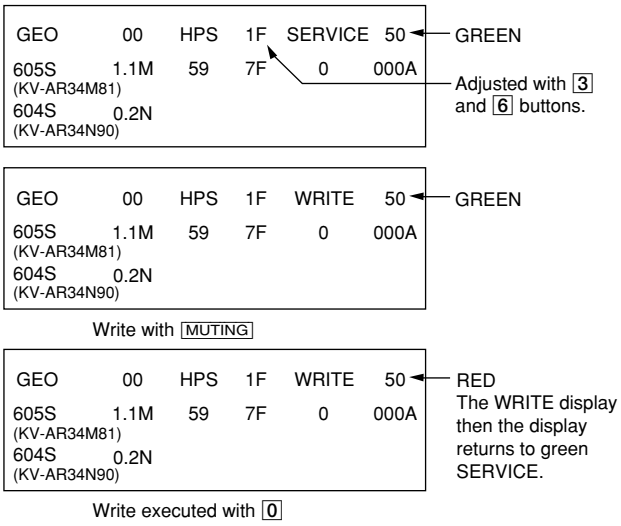
4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

This explanation uses H-Position as an example.

1. Select "GEO 00 HPS" with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the [MUTING] button. (The display changes to WRITE.)
5. Execute the writing with the [0] button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)

Example on screen display :-



Use the same method for all Items. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Note : 1. In [WRITE], the data for all items are written into memory together.
2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

Adjustment Item Table (Except KV-AR34M60)

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)					
Category	No	Name				Common	50NC	60NC	50VC	60VC	
GEO	00	HPS	H Position	Normal (50/60)/Wide (50/60)	CXA2159S		12	0A	12	0A	KV-AR34M81
	00	HPS	H Position	Normal (50/60)/Wide (50/60)			1E	1E	1E	1E	KV-AR34N90
	01	HSZ	H Size	Normal (50/60)/Wide (50/60)			25	25	25	25	
	02	PAP	Pin Amp	Normal (50/60)/Wide (50/60)			1F	1F	1F	1F	
	03	TLT	Trapezium	Normal (50/60)/Wide (50/60)			07	07	07	07	
	04	VPS	V Position	Normal (50/60)/Wide (50/60)			1F	1F	1F	1F	
	05	VSZ	V Size	Normal (50/60)/Wide (50/60)			0F	0F	07	07	
	06	SCO	S Correction	Normal (50/60)/Wide (50/60)			07	07	07	07	
	07	VLN	V Linearity	Normal (50/60)/Wide (50/60)			07	07	07	07	
	08	BOW	AFC Bow	Normal (50/60)/Wide (50/60)			07	07	07	07	
	09	AGL	AFC Angle	Normal (50/60)/Wide (50/60)			07	07	07	07	
	0A	UPN	Upper Pin	Normal (50/60)/Wide (50/60)			1F	1F	1F	1F	
	0B	LPN	Lower Pin	Normal (50/60)/Wide (50/60)			1F	1F	1F	1F	
	0C	HBL	H Blanking on/off			01					
	0D	LBL	Left H Blanking	Normal (50/60)/Wide (50/60)			0A	0F	0A	0F	
	0E	RBL	Right H Blanking	Normal (50/60)/Wide (50/60)			02	02	02	02	

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)				
Category	No	Name				Common	SECAM	Others	Dynamic	Others
WHB	00	RDR	R Drive	DYNAMIC/others	CXA2159S				25	2A
	01	GDR	G Drive	DYNAMIC/others					25	25
	02	BDR	B Drive	DYNAMIC/others					25	25
	03	RCT	R Cutoff	SECAM/others			07	07		
	04	GCT	G Cutoff	SECAM/others			07	07		
	05	BCT	B Cutoff	SECAM/others			07	07		
	06	BMN	Brightness Minimum Data			15				
	07	SBR	Sub Brightness Control			25				
	08	APB	Sub Bright Control Switch for Intelligent Picture #3			03				

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)							
Category	No	Name				NC	VC	NTSCNC	OTHERSNC	NTSCVC	OTHERSVC	TV	Video
SAJ	00	PMX	Picture Maximum Data	non-Wide/Wide	CXA2159S	36	31						
	01	SHU	Sub Hue Control	TV/Video								07	07
	02	SSH	Sub Sharpness Control	TV/Wide								04	09
	03	SCL	Sub Color Control	(NTSC/others)/WIDE(NTSC/others)				23	21	20	1E		

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)								
Category	No	Name				Common	50NC	60NC	50VC	60VC	NTSC NON-STD	OTHERS NON-STD	NTSC STD	OTHERS STD
VP	00	EHT	EHT Copm	Normal(50/60)/Wide(50/60)	CXA2159S		05	05	05	05				
	01	GMA	Gamma Correction (sepatated in STANDARD mode)	NON-STD.(NTSC/others)/STD.(NTSC/others)							**03**	**03**	**02**	**02**
	02	APG	Gamma Control Switch for Intelligent Picture #3	NON-STD.(NTSC/others)/STD.(NTSC/others)							**00**	**00**	**00**	**00**

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)					
Category	No	Name				Common	SECAM	NTSC	PAL	DVD	TEXT
VP	03	YDL	Y Delay	PAL/SECAM/NTSC/DVD			09	08	06	08	
	04	SST	SECAM ID Start Position	SECAM&ATUTO/FORCED-PAL&NTSC			01		01		
	05	SSP	SECAM ID Stop Position	SECAM&ATUTO/FORCED-PAL&NTSC			01		01		
	06	RLM	RGB Limit			00					
	07	SLV	SECAM ID Level	SECAM&ATUTO/FORCED-PAL&NTSC			02		02		
	08	SBF	SECAM BELL fO	SECAM&ATUTO/FORCED-PAL&NTSC			22		22		

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)					
Category	No	Name				Common	NTSC	Others	TV	Video	TEXT
VP	09	DYC	Dynamic Color on/off			01					
	0A	ABL	ABL Mode Switching (except STANDARD mode)	except STANDARD		01					
	0B	VTH	ABL Detection Vth Switching			01					
	0C	SF0	FO Switching for Sharpness	NTSC/others			01	01			
	0D	DCX	DC Trans. Ratio Switching			01					
	0E	SHT	Pre-/Overshoot ratio Switch	NTSC/others			01	01			
	0F	HDW	H Drive Pulse Width Switch			00					
	10	AFC	AFC Gain Control	TV/Video/Text					01	00	01
	11	HOS	H Oscillation			07					
	12	HSS	Slice Level of H Sync Sep.			00					
	13	VSS	Slice Level of V Sync Sep.			00					

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)								
Category	No	Name				Common	50NC	60NC	50VC	60VC	NTSCNC	OTHERSNC	NTSCVC	OTHERSVC
VP	14	HMS	Macro Vision C/m off/on		CXA2159S		01	01	01	01				
	15	YUV	Y SEL			00								
	16	CDV	CD mode for Video and RF under no signal			01								
	17	RON	R ON			01								
	18	GON	G ON			01								
	19	BON	B ON			01								
	1A	PON	P ON			01								
	1B	AXN	AXIS SW								01	01	01	01
	1C	RSL	RGB SEL			00								
	1D	VBW	VBLKW			00								
	1E	RFP	REFP			00								
	1F	VMC	VM Level			00								
	20	CBF	Chroma Bandpass Filter			01								
	21	CTO	Chroma Trap Off			01								

TVG	Functionality		Function	NVM Address / Initial Value (Detailed)						
Category	No	Name		Common	Dynamic	Standard/Drama	Hi-Fine/Soft	Dyna bsw	Drama bsw	Soft bsw
AP2	00	BBS	Bass Boost Level Setting	03						
	01	BCB	Boost cut select for Sub Bass Control	00						
	02	SBS	Sub Bass Level Setting	00						
	03	BCT	Boost cut select for Sub Treble Control	00						
	04	STS	Sub Treble Level Setting	00						
	05	AGL	AGC Level Setting	00						
	06	BSW	Bass Boost ON/OFF Switch	00						
	07	BAS	Bass sound mode Control		11	03	03	11	03	03
	08	TRE	Treble sound mode Control		14	14	02	14	14	02
	09	BBE	BBE Sound mode Control		89	6C	00	89	6C	00

TVG	Functionality		Function	Device Name	NVM Address / Initial Value (Detailed)			
Category	No	Name			Common	SECAM	NTSC	PAL
MSP	00	WST	W/G Stereo Threshold	MSP34150	15			
	01	WBT	W/G Bilingual Threshold		EC			
	02	WLL	W/G Monaural Threshold		05			
	03	WAC	W/G Agreement Count		01			
	04	WDL	W/G Search Delay		30			
	05	NDL	NICAM Search Delay		20			
	06	SDL	Stereo status Read Delay		10			
	07	AGC	AGC Switch Auto/Constant		01			
	08	REL	AGC Gain at Constant Mode		28			
	09	CRM	Carrier muting on/off		00			
	0A	ACO	Audio Clock out on/off		01			
	0B	FP	FM Prescale for non-M system		1B			
	0C	FPM	FM Prescale for M system		32			
	0D	FH	FM Prescale for HDEV		36			
	0E	FHM	FM Prescale for HDEV and M		65			
	0F	WGP	W/G Prescale		1C			
	10	NIP	NICAM Prescale		7F			
	11	ERR	Auto FM switch Threshold		50			
	12	ERR	Loud Speaker gain 7000h to 7ff0h		6D			

TVG	Functionality		Function	Device Name	NVM Address / Initial Value (Detailed)			
Category	No	Name			Common	SECAM	NTSC	PAL
PIP	00	PRO	Progreeive Scan Mode Enable	MSP34150	00			
	01	RED	Read Double Mode		00			
	02	FEI	Field Select		00			
	03	HPS	Horizontal Picture Position		33			
	04	VPS	Vertical Picture Position		1B			
	05	HFP	Horizontal Fine Positioning		08			
	06	VFP	Vertical Fine Positioning		00			
	07	DIS	Display standard		00			
	08	HOS	Horizontal Zoom		00			
	09	VES	Vertical Sync Pule Noise Reduction		00			
	0A	FPS	Force Parent Standard		00			
	0B	HZM	Horizontal Zoom		00			
	0C	VSP	Vertical Sync Pule Noise Reduction		01			
	0D	VDL	Vertical Sync Pulse Delay		00			
	0E	FRH	Frame Width Horizontal		05			
	0F	FWV	Frame Width Vertical		02			
	10	VRD	Reduction		00			
	11	VBK	Vertical Blanking		00			
	12	DLY	Select Delay		01			
	13	PCR	Position Correction		00			
	14	AGM	AGC Mode		03			
	15	AGC	Automatic Gain Control Value		09			
	16	CVN	CVBS Select		00			
	17	CPD	CLAMPING Duration		01			
	18	CPT	CLAMPING Pulse start		01			
	19	LUM	Luminance offset		00			

TVG	Functionality		Function	NVM Address / Initial Value (Detailed)					
Category	No	Name		SECAM	NTSC	PAL	TV	Video	DVD
PIP	1A	PLL	Insert PLL Time Constant				00	00	
	1B	YCD	Y/C Delay	08	08	08			**08**
	1C	NSR	Noise Reduction for inset PII				02	00	

TVG	Functionality		Function	Table & Note	NVM Address / Initial Value (Detailed)		
Category	No	Name			Common	50	60
PIP	1D	LSP	Standard Identification Speed		00		
	1E	KIL	Color Killer Threshold		02		
	1F	BGP	Burst Gate Position		01		
	20	SEC	SECAM Identification Level		01		
	21	DEM	Deemphasw selection		01		
	22	CMA	Chroma Bandwith		00		
	23	IFC	IF Compensation Filter		02		
	24	HUE	Hue		00		
	25	SCA	Color Subcarrier Adjustment		06		
	26	CON	Contrast Adjustment		00		
	27	BLR	Blanking Level Red Channel		00		
	28	BRT	Brightness Adjustment		03		
	29	BLG	Blanking Level Green Channel		00		
	2A	BIR	Blanking Inversion Red Channel		00		
	2B	BIB	Blanking Inversion Blue Channel		00		
	2C	BLB	Blanking Level Blue Channel		00		
	2D	INT	Refresh Interval		00		
	2E	PKR	Peak Level Red Channel		85		
	2F	PKG	Peak Level Green Channel		85		
	30	PKB	Peak Level Blue Channel		85		
	31	FRY	Frame Color Y		09		
	32	OUT	Output Format		01		
	33	FRU	Frame Color Y		00		
	34	FRV	Frame Color V		00		
	35	SAT	Color Saturation Adjustment		09		
	36	YDK	Y Peak Adjustment		03		
	37	YCO	Y Coring Enable		01		
	38	PAL	PAL ID Level		03		
	39	POV	Position Offset Vertical		00		
	3A	POH	Position Offset Horizontal		00		
	3B	VSH	Vertical Shrink		00		
	3C	HSH	H Shrink		00		
	3D	CPL	CLAMPING Pulse Length		01		

TVG	Functionality		Function	Device Name	NVM Address / Initial Value (Detailed)			
Category	No	Name			COMMON	S-INPUT	TV	VIDEO
YCT	00	SHU	Sub Hue Adjustment	CXA2163AQ			0E	12
	01	PNG	PAL/NTSC Gate Width		01			
	02	PNI	PAL/NTSC Sensitivity SW		00			

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)						
Category	No	Name				COMMON	50TV	50VIDEO	50DVD	60TV	60VIDEO	60DVD
YCT	03	SCL	Sub Color Control	50/60*TV/Video	CXA2163AQ		05	**07**		05	**07**	
	04	SCT	Sub Contrast Control	50-60*TV/Video			05	**08**		05	**08**	
	05	SF0	Sharpness Center Frequency Changing			02						
	06	SEQ	Sharpness Equalizer Characteristic			00						
	07	SHG	Sharpness Gain Control	50/60*TV/Video/DVD			07	08	0A	06	08	0A
	08	YOL	Y-output Level Control			21						
	09	BSP	Black Strecth Start Point Changing			00						

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)					
Category	No	Name				COMMON	S-INPUT	TV	VIDEO	DVD	OTHERS
YCT	0A	COL	Cb/Cr Output Level Control		CXA2163AQ					**27**	1E
	0B	DCR	DC Restoration Ratio Adjustment			00					
	0C	BF0	BPF/TQF F0 Adjustment			01					
	0D	BFQ	BPF/TQF Q Adjustment			02					
	0E	FSW	BPF/TQF Switch			01					
	0F	SDT	SECAM Double Trap Switch			01					
	10	LPF	Y/Cb/Cr LPF Switch			01					
	11	YDL	Y-DL Time Adjustment	TV/Video/S-input/DVD			05	06	05	05	
	12	CMT	Cb/Cr Output Mute Switch			00					
	13	B01	Cb Offset1 Adjustment (main route)			07					
	14	RO1	Cr Offset1 Adjustment			07					
	15	CDF	VCount Down Frequency Switch	forced 50Hz for no signal		00					
	16	CDM	V Count Down Judge Switch			00					
	17	AFC	AFC Sensitivity Switch	(TV/)Video/DVD					00	00	
	18	MVM	Macrovision Mask + AFC Mask			01					
	19	SRY	SECAM R-Y Black Adjustment			07					
	1A	SBY	SECAM B-Y Black Adjustment			01					
	1B	BEL	SECAM BELL/HPF Switching			02					
	1C	BLF	BELL f0 Adjustment			00					
	1D	SVI	SECAM V-ID Switch			00					
	1E	SGP	SECAM Gate Position Adjustment			00					
	1F	SID	SECAM Sensitivity Switch	except SECAM		01					
	20	SIH	SECAM Inhibition Switch			00					
	21	STP	Y Black Level Setup for PAL plus			00					
	22	ASW	Auto Video Select Mode SW			01					
	23	WSH	Sharpness Gain Step for noise reduction			00					
	24	WCO	Cb/Cr Output Level Step for noise reduction			00					
	25	CB2	Cb2 offset abjustment (YCbCr2 input)			07					
	26	CR2	Cr2 offset abjustment (YCbCr2 input)			07					
	27	HPH	HS Output phase switch			00					
	28	VPH	Switch for VP output phase			00					
	29	NCM	NTSC COMB			00					

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)		
Category	No	Name				COMMON	NTSC	OTHERS
TE	00	NR0	NR	NTSC/Others	DTE		01	01
	01	TC0	TE Coring	NTSC/Others			05	05
	02	TG0	TE Gain	NTSC/Others			05	05
	03	STH	Forced TE bypass 1:TE bypass			00		
	04	COF	Color Component OFF 1:OFF (512)			00		
	05	YOF	Luminance Component OFF 1:OFF			00		
	06	VJR	V jitter control 0:ON 1:SP1 2:SP2 3:SP2			00		
	07	TOF	TE OFF 1:TE OFF			00		
	08	DOF	Dot NR OFF 1:Dot NR OFF			00		
	09	FOF	TE LPF OFF 1:LPF OFF			01		
	0A	CTH	Color TE OFF 1:OFF			00		
	0B	PSL	TE Parameter Selection			02		
	0C	CLP	Input Clamp Level			08		
	0D	CL2	Output Clamp Level			08		
	0E	LA1	Level depend Gain (+, White)			00		
	0F	LA2	Level depend Gain (+, Black)			01		
	10	LA3	Level depend Gain (-, White)			0F		
	11	LA4	Level depend Gain (-, Black)			01		
	12	CRW	TE Y/C compensation ratio			04		
	13	YCD	TE Y/C output delay adjustment			04		
	14	OSO	Off sharpness offset			00		
NR	00	DMO	NR Demo Mode ON/OFF (1=Demo Mode)		DTE	00		
	01	THV	Offset of Noise Threshold level for vertical direction			03		
	02	THH	Offset of level Threshold level for horizontal direction			11		
	03	BLL	Offset of Level detection for Black Level			07		
	04	CST	Offset of Level detection for Color Level			07		
	05	THC	Offset of Edge Detection Threshold			09		
	06	NRF	NR0 always Rank = 0			00		
	07	DIG	A/D In or Digital In (1=Digital In)			00		
TXT	00	TXH	Teletext Horizontal Position		SAA5261	00		
	01	TXV	Teletext Vertical Position			00		
OPM	00	OSH	OSD H Position		CXP750097	**0F**		
	01	COM	Comb Selection (0: None, 1:NTSC, 2:Multi, 3:3D) [NON-DTE]/(0:None, 1:Multi, 2:3D, 3: None)[DTE]			02		

TVG	Functionality		Function	Table & Note	Device Name	NVM Address / Initial Value (Detailed)		
Category	No	Name				COMMON	NTSC	Others
OPM	02	APC	APC Switch		CXP750097	01		
	03	TSY	TV Sys at Auto			00		
	04	MUT	No Signal Mute			01		
	05	AFM	Auto FM switch			01		
	06	RFB	C-BPF Control			00		
	07	TVO	Tilt to V-Angle offset			03		
	08	DBL	Disable Blueback Function			00		
	09	SSO	Speed Search Option (0: Off, 1: 4x, 2: 6x, 3:8x)			01		
	0A	SCH	CH Selection for Shipping Condition	NTSC Models only		07		
	0B	SCA	Cable/Air selection for shipping condition	NTSC Models only		01		
	0C	POR	Power On Reset Dectection From YCT			00		
	0D	NRC	N-Det Counter for PICSI			1F		
	0E	RUC	RF Signal change counter after Unlocked			0F		
	0F	RLC	RF Signal change counter after Locked			0F		
	10	BYP	Bypass PICSI			00		
	11	PBL	PICSI ON/OFF Blanking			00		
OPB	00	OP1	Optional Bits 1 (see SPECIFIED PAGES)	Option - Bits				
	01	OP2	Optional Bits 2 (see SPECIFIED PAGES)					
	02	OP3	Optional Bits 3 (see SPECIFIED PAGES)					
	03	OP4	Optional Bits 4 (see SPECIFIED PAGES)					

NOTE

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory. In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

ITEM INFORMATION

No. OPB0 OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
KV-AR34M81	1	1	1	1	1	1	1	1
KV-AR34N90	1	1	1	1	0	0	0	1

No. OPB1 OP2

Item	TOP	NICAM	HDEV	Thai Bil	PIP4	DVD Input	AV Input	
KV-AR34M81	0	0	0	0	0	1	1	1
KV-AR34N90	0	0	0	0	0	1	1	1

AV Input 00 = no AV Input 01 = 1 AV Input
10 = 2 AV Input 11 = 3 AV Input

DVD Input Effective only when "AV Input" is set to 3 AV Input

PIP 4 PIP 4 0 = disabled, 1 = enabled

No. OPB2 OP3

Item	Initial Menu	AP2	Auto PIC	A-TVsys	US ST	DTE	Forced 50/60	Colour SW*2
KV-AR34M81	1	1	1	0	0	0	0	1
KV-AR34N90	1	1	1	0	1	0	0	1

Initial Menu Initial Men Setup 0 = disabled, 1 = enabled

AP2 Auto Processor Selection 0 = AP, 1 = AP2.

Auto PIC*3 Auto Picture Improvement 0 = off PNC1/PNC2
1 = activate PNC1/PNC2

A-TVsys Auto TV System in Auto Program 0 = disabled, 1 = enabled

US ST* USA Stereo 0 = disabled, 1 = enabled

DTE DTE Model Selection 0 = Non DTE, 1 = DTE

Forced 50/60 Forced to 50/60 Hz during no signal condition 0=60Hz, 1=50Hz

Color SW*2 Color Data Selection in Dynamic Mode 0 = 65 (No PIP), 1 = 57 (PIP)

Note: *1 - For XA21/XH29 Models Only
*2 - For XA34/29/25 Models Only
*3 - For PNC3, the enables are from service item APG and APB.

No. OPB3 *OP4

Item	PNC2	Korean ST	Vid NTSC3.58	Wide	Video3	Chinese(Multi mdl)	Arabic/C.Chinese	Thai/Korean
KV-AR34M81	0	0	0	1	0	1	1	1
KV-AR34N90	1	0	0	1	0	0	1	0

APPLICABLE TO XS ONLY - Sub Language Selection (Bit 0 - Bit 2)

Korean Stereo* Korean Stereo 0 = disabled, 1 = enabled

PNC2*2 Enable switch of PNC2 0 = disable, 1 = enable

Video NTSC3.58* Video Color System 0 = Multi System, 1 = Single System (NTSC3.58)

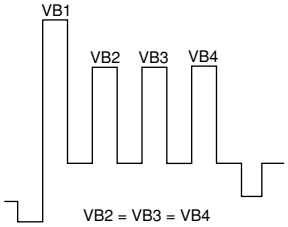
Wide Enable wide mode 0 = disable, 1 = enable

Note : *APPLICABLE FOR NTSC MODELS ONLY

4-3. ADJUSTMENT FOR NON DIGITAL TEXTURE ENHANCER (DTE) MODEL

SUB COLOR ADJUSTMENT (KV-AR25/AR29)

1. Select Video.
2. Input PAL Color Bar
3. Set to following condition PICTURE 100%, BRIGHTNESS 50%, Color 50%.
4. Connect an oscilloscope to pin ① (BOUT) of CN305, A Board.
5. Set the service mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust the VB2=VB3=VB4 [3] and [6].
6. Press [MUTING] → [0] of the commander to write the data.
7. Input NTSC Color Bar to set and repeat items (3 to 7).
8. Select "WIDE" mode, write the "SAME DATA- 3 STEPS" for both PAL and NTSC Color Bar input.



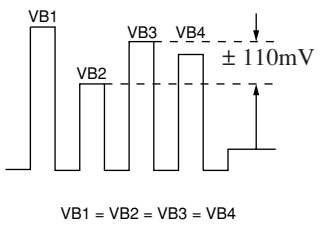
VB2 = VB3 = VB4 (Difference is within 70mV)

SUB COLOR ADJUSTMENT (KV-AR34)

1. Select Video.
2. Input PAL Color Bar
3. Set to following condition PICTURE 100%, BRIGHTNESS 50%, Color 50%.
4. Connect an oscilloscope to pin ① (BOUT) of CN305, A Board.
5. Set the service mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust the VB2=VB3=VB4 [3] and [6].
6. Press [MUTING] → [0] of the commander to write the data.
7. Add 6 steps and save the data.
8. Input NTSC Color Bar to TV set and repeat items 3 to 7.
9. Select "WIDE" mode, write the "SAME DATA- 3 STEPS" for both PAL and NTSC Color Bar input.

SUB HUE ADJUSTMENT

1. Select Video 1.
2. Input a NTSC 3.58 color-bar, video into Video 1.
3. Set the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 "SHU" with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].



The highest level of VB1,VB2,VB3,VB4 must be aligned at the same line. Ideal difference level between VB2 and VB3 should be within ± 110mV.

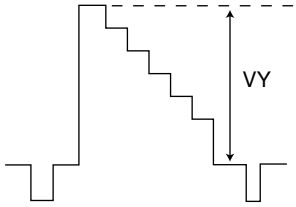
6. Press [MUTING] → [0] of the commander to write the data.
7. Adjust SAJ 1 "SHU" as step 3 to 6 when receiving TV mode.

4-4. ADJUSTMENT FOR DIGITAL TEXTURE ENHANCER (DTE) MODEL (not used for this models)

Y LEVEL ADJUSTMENT

1. Select Video.
2. Input PAL Color Bar to TV set (white reference 100%).
3. Set the following condition:
   DTE : ON
   Picture Mode : Dynamic
4. Connect an oscilloscope to pin ① (CV/Y in) of CN106, A Board.
5. Set to Service Mode and YCT 08 'YOL' with [1] and [4] of the commander then adjust to VY within spec with [3] and [6].
6. Then press [MUTING] → [0] to write the data.
7. Select RF.
8. Repeat item [2] to [4].
9. Set to Service Mode and YCT 04 'SCT' with 1 and 4 of the commander then adjust to VY within spec with [3] to [6].
10. Copy SCT data to NTSC (RF).

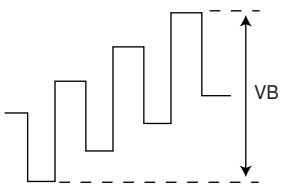
SCT Setting (Video Mode) : 07h (NTSC & PAL)



SPEC: VY : 1.2 Vpp ± 0.05m Vpp

SUB COLOR (YCT) ADJUSTMENT

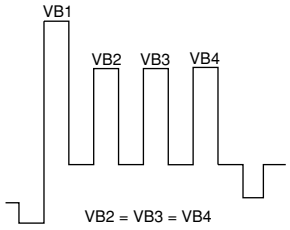
1. Select Video.
2. Input NTSC Color Bar.
3. Set the following condition:
   DTE : ON
   Picture Mode : Dynamic
   NTSC 75% Color Bar
4. Connect an oscilloscope to pin ② (B-Y in) of CN303, A Board.
5. Set to Service Mode and YCT 0A 'COL' with [1] and [4] of the commander then adjust to VB within spec with [3] and [6].
6. Then press [MUTING] → [0] to write the data.
7. Select RF.
8. Repeat item no [2] to [4].
9. Set to Service Mode and YCT 03 'COL' with [1] and [4] of the commander then adjust the waveform within spec with [3] and [6].
10. Then press [MUTING] → [0] to write the data.
11. Input PAL Color Bar (75%) and repeat item no 8 to 10.



SPEC :
VIDEO : VB = 0.931 Vpp ± 50 mVpp
RF : VB = 0.931 Vpp ± 50 mVpp

SUB COLOR (YCJ) ADJUSTMENT

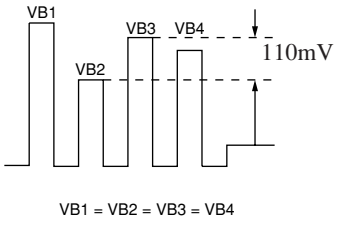
1. Select Video.
2. Input PAL Color Bar to TV set.
3. Set the following condition:
   Pic: 100%, Col: 50%, Brightness: 50%, DTE: OFF
4. Connect an oscilloscope to pin ② (B output) of CN305, A Board.
5. Set to Service Mode and SAJ 03 'SCL' with [1] and [4] of the commander then adjust to VB2 = VB3 = VB4 = with [3] and [6].
6. Then press [MUTING] → [0] to write the data.
7. Add offset steps and save the data.
   Offset: 25... 0
   29... 0
   34... 0
8. Input NTSC color bar to TV set and repeat item no 3 to 7.
10. Select "WIDE" mode, write the "SAME DATA - 3 STEPS" for both PAL and NTSC input.



VB2 = VB3 = VB4 (Difference is within 70mV)

SUB HUE ADJUSTMENT

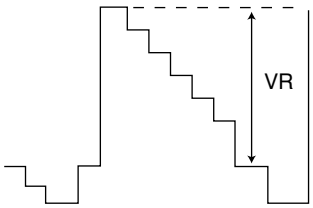
1. Select Video.
2. Input NTSC 3.58 Color Bar to TV Set.
3. Set the following condition:
   Pic: 100%, Col: 50%, Brightness: 50%, DTE: OFF
4. Connect an oscilloscope to pin ① (B output) of CN305, A Board.
5. Set to Service Mode and YCT 00 'SHU' with [1] and [4] of the commander then adjust to VB1 = VB2 = VB3 = VB4 = with [3] and [6].
6. Then press [MUTING] → [0] to write the data.
7. Select RF.
8. Input NTSC 3.58 and repeat item no 3 and 6.



The highest level of VB1, VB2, VB3, VB4 must be aligned at the same time.
Ideal difference level between VB2 and VB3 should be within ± 110 mVpp.

PMX ADJUSTMENT

1. Select Video (Wide mode: OFF).
2. Input PAL Color Bar to TV set.
3. Set the following condition:
   Pic: 100%, Col: 50%, Brightness: 50%, DTE: OFF
4. Connect an oscilloscope to pin ③ (R output) of CN305, A Board.
5. Set to Service Mode and SAJ 00 'PMX' with [1] and [4] of the commander then adjust to VR within spec with [3] and [6].
6. Then press [MUTING] → [0] to write the data.
7. Select "Wide" mode, write the "SAME DATA- 5 STEPS".



VR = 2.35 Vpp
(Difference is within 50 mVpp)

VP 06 RLM : 03H
17 R ON : 01H
18 G ON : 00H
19 B ON : 00H
After adjustment, these adjustment parameters must be recovered to the original condition.

4-5. DISPLAY POSITION ADJUSTMENT
(not used for this models)

PIP POSITION

1. Input a PAL color-bar.
2. Press PIP button of the remote commander to set the PIP picture.
3. Set to Service Mode.
4. Use [1] and [4] of the remote commander to select PIP 03 "HPS" and use [3] and [6] to set data "15".
5. Select PIP 04 "VPS" to set data "2E".
6. Press [MUTING] → [0] of the remote commander to write the data.
7. Use the screen display menu changing the PIP position to check the PIP position.

4-6. DEFLECTION ADJUSTMENT

NORMAL MODE (50Hz)

1. Set Video Mode.
2. Using the [1] and [4] button, select category GEO (Service Mode).
3. Raise/lower the data using the [3] and [6] buttons. Select and adjust the following items to obtain optimum image.

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	02	PAP	PIN AMP
	03	TLT	TILT
	04	VPS	V POSITION
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

WIDE MODE (50Hz)

4. Input PAL color bar.
5. Adjust condition change to WIDE MODE : ON.
6. Using the [1] and [3] button, select category GEO (Service Mode).
7. Copy (item from normal mode (50Hz)) adjusted data for the following item:

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY

8. Raise/lower data using [3] and [6] buttons, select and adjust the following items to obtain optimum image.

Service Item

GEO :	02	PAP	PIN AMP
	03	TLT	TILT
	04	VPS	V POSITION
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

9. After confirm WIDE MODE : ON – OFF.

NORMAL MODE (60Hz)

1. Set to Service Mode.
2. Using the [1] and [4] buttons select category GEO (Service Mode).
3. Select and adjust the following items to obtain obtimum image. Raise/lower the data with the [3] and [6] buttons.

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	02	PAP	PIN AMP
	03	TLT	TILT
	04	VPS	V POSITION
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

WIDE MODE (60Hz)

4. Input monoscope signal.
5. Adjust condition change to WIDE MODE: ON.
6. Using the [1] and [4] button select category GEO (Service Mode).
7. Copy (item from NORMAL MODE (60Hz)) adjusted data for the following items:

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY

8. Raise/lower the data with the [3] and [6] buttons. Select and adjust the following items to obtain optimum image.

Service Item

GEO :	02	PAP	PIN AMP
	03	TLT	TILT
	04	VPS	V POSITION
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

9. After confirm WIDE MODE : ON – OFF.

Note:
For Deflection Adjustment, set PICTURE MODE to "SOFT".

4-7. H-TRAPEZOID ADJUSTMENT

1. Receive cross hatch/dot signal.
2. Adjust RV1801 on C6 board to make H-Trapezoid distortion best.

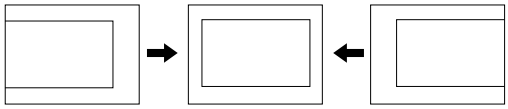
4-8. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.
2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.
3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the fine adjustment.
   Write the data per each item number ([MUTING] → [0]).
4. Select item numbers “OPB00” (OP1), “OPB01” (OP2), "OPB 02" (OP3) and "OPB 03" (OP4) respectively set the bit per model with command buttons [3] and [6].
5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (This will also cancel Service Mode.)

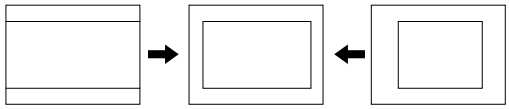
4-9. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

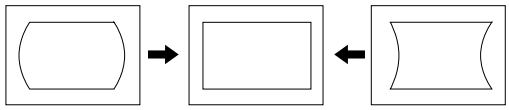
GEO 0 HPS (H POSITION)



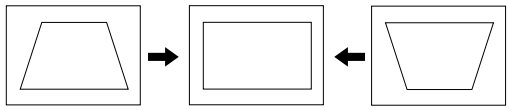
GEO 1 HSZ (H SIZE)



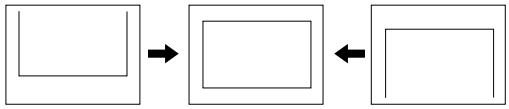
GEO 2 PAP (PIN AMP)



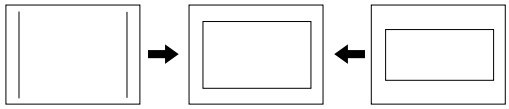
GEO 3 TLT (TRAPEZIUM)



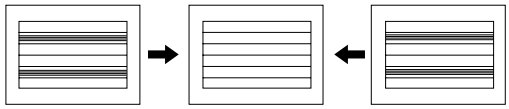
GEO 4 VPS (V POSITION)



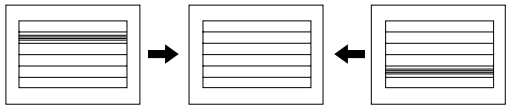
GEO 5 VSZ (V SIZE)



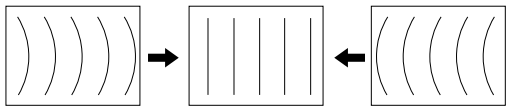
GEO 6 SCO (VERTICAL S-Correction)



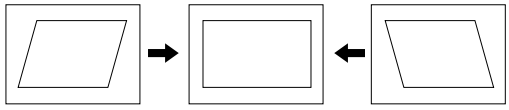
GEO 7 VLN (V LINEARITY)



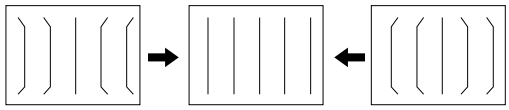
GEO 8 BOW (AFC. BOW)



GEO 9 AGL (AFC. ANGLE)

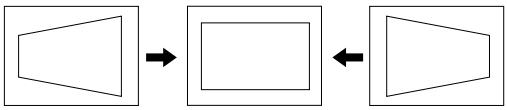


GEO 0A UPN (UPPER CORNER PIN)
GEO 0B LPN (LOWER CORNER PIN)



PICTURE DISTORTION ADJUSTMENT (2)

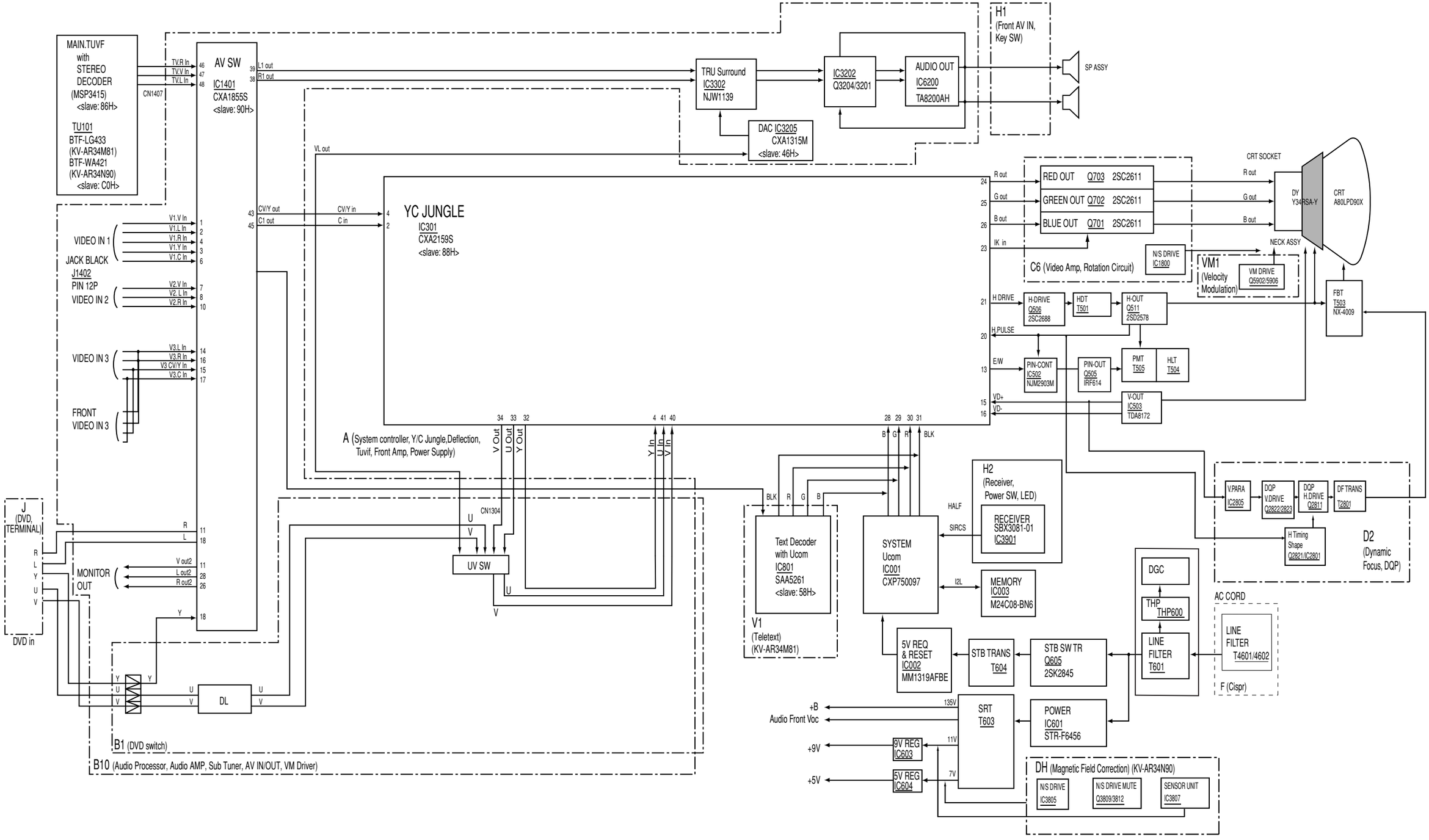
H-TRAPEZOID (DAC 4 HTR)



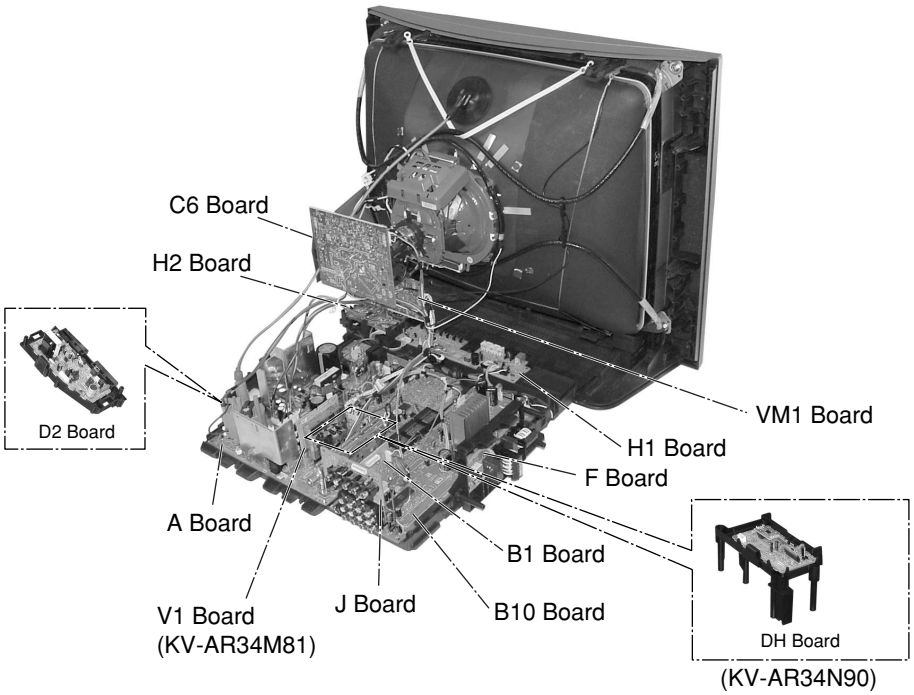
KV-AR34M81/AR34N90 RM-995 RM-996

SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM



5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAM

Note:

- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

- PWB : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation or adjustment for rrepair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Redings are taken with a color-bar signal input.**
  no mark : COMMON
  ( ) : PAL
  [ ] : NTSC 3.58
- **Readings are taken with a 10MΩ digital multimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltage are in V.**
- **✻ : Cannot be measured.**
- **Circled numbers are waveform references.**
- **▬▬ : B +bus.**
- **■ ■ ■ : B –bus.**
- **⇨ : signal path.**

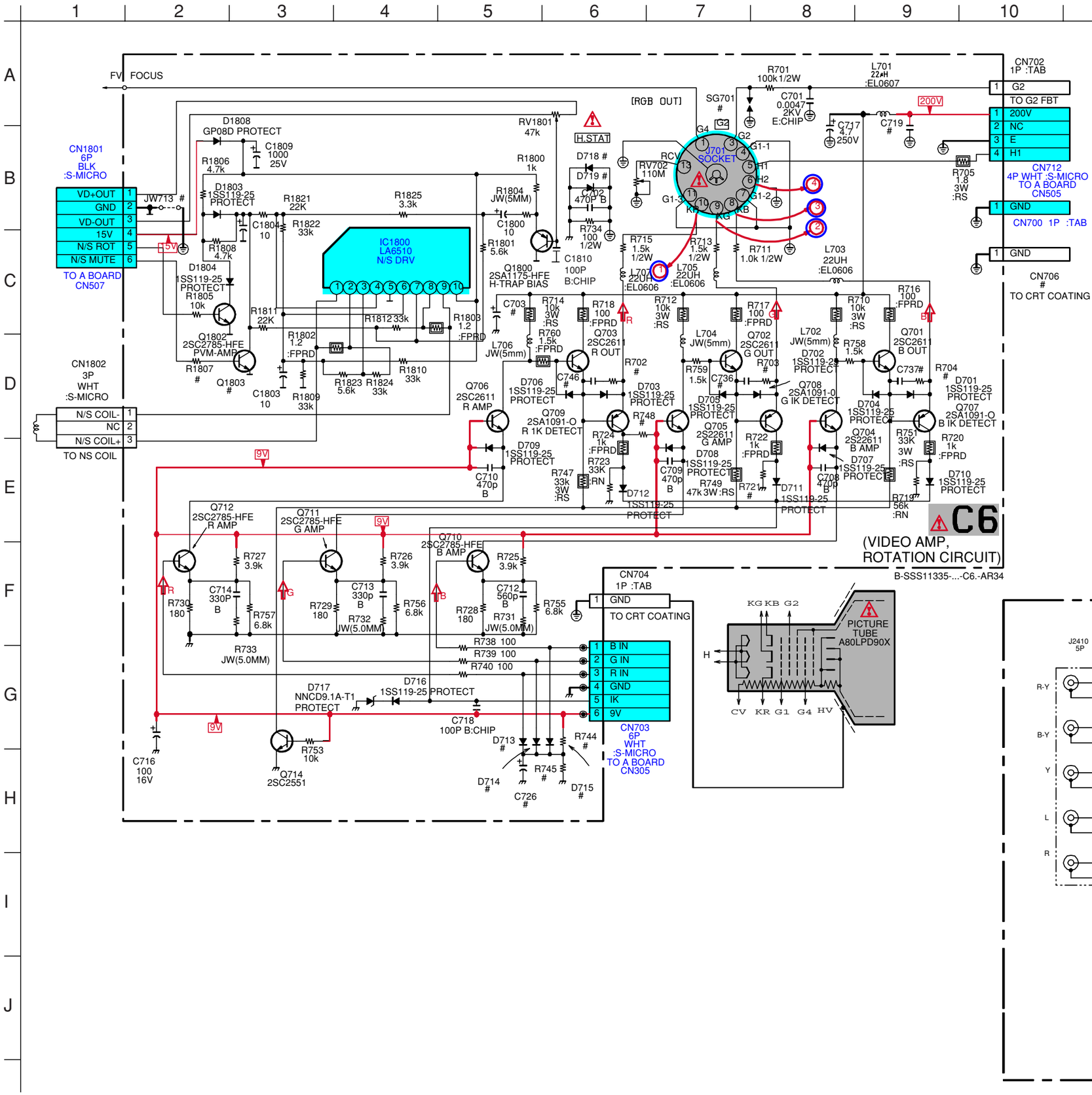
Reference information

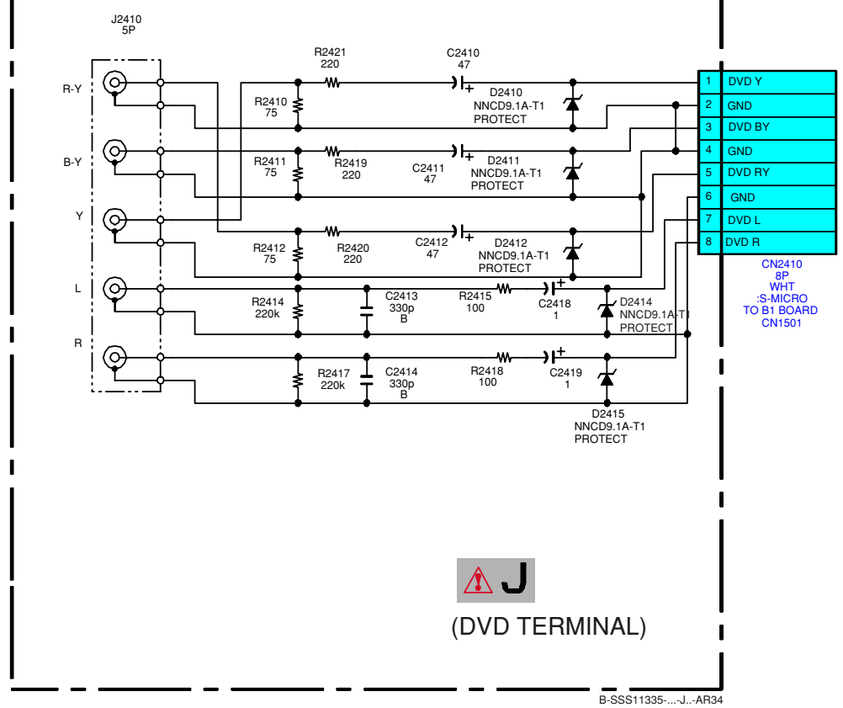
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ✻	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

KV-AR34M81/AR34N90
RM-995 RM-996

(1) C6 and J Boards Schematic Diagrams





KV-AR34M81/AR34N90 RM-995 RM-996

(2) A Board Schematic Diagram

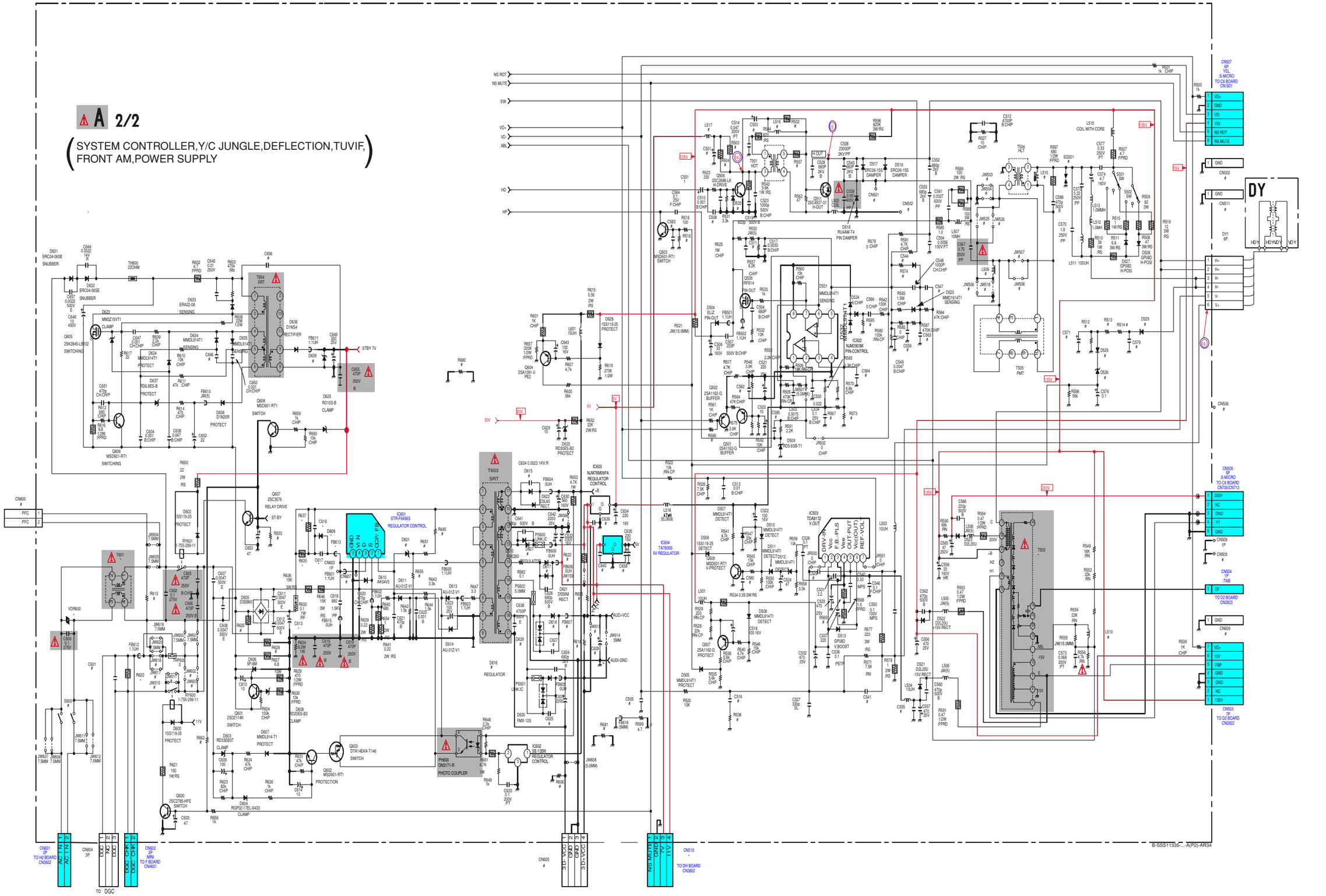
1/2

(SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,TUVIF, FRONT AM,POWER SUPPLY)

KV-AR34M81/AR34N90
RM-995 RM-996

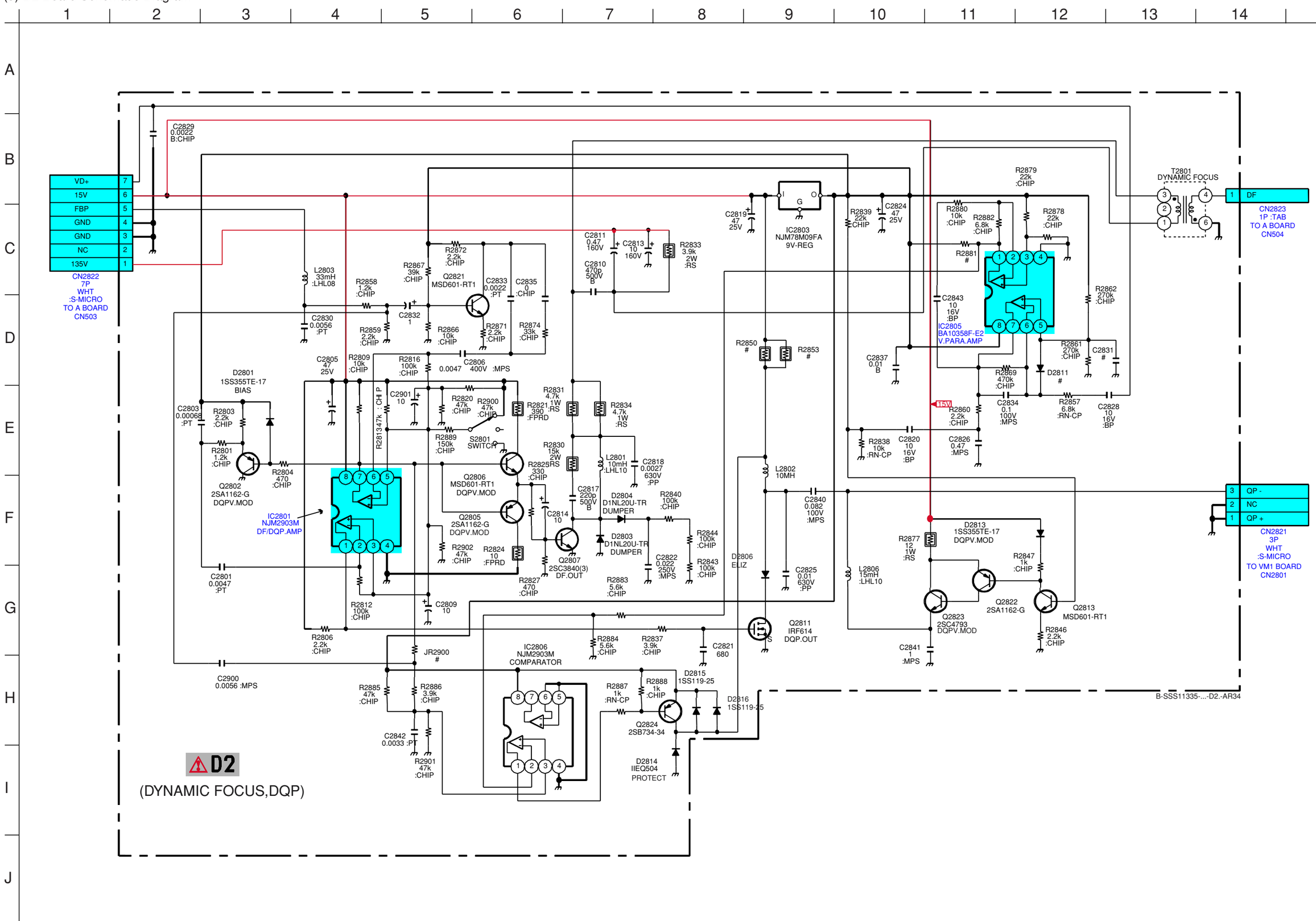
A 2/2

(SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,TUVIF, FRONT AM,POWER SUPPLY)


CN507 6P YEL :S-MICRO TO C6 BOARD CN1801
CN505 2P :S-MICRO TO O6 BOARD CN700/CN712
CN503 7P TO D2 BOARD CN2822
CN601 2P TO H2 BOARD CN2602
CN602 2P MINI TO F BOARD CN4601
CN604 3P
CN610 TO DH BOARD CN2802
DY
B-SSS1133S-...-A(P2)-AR34

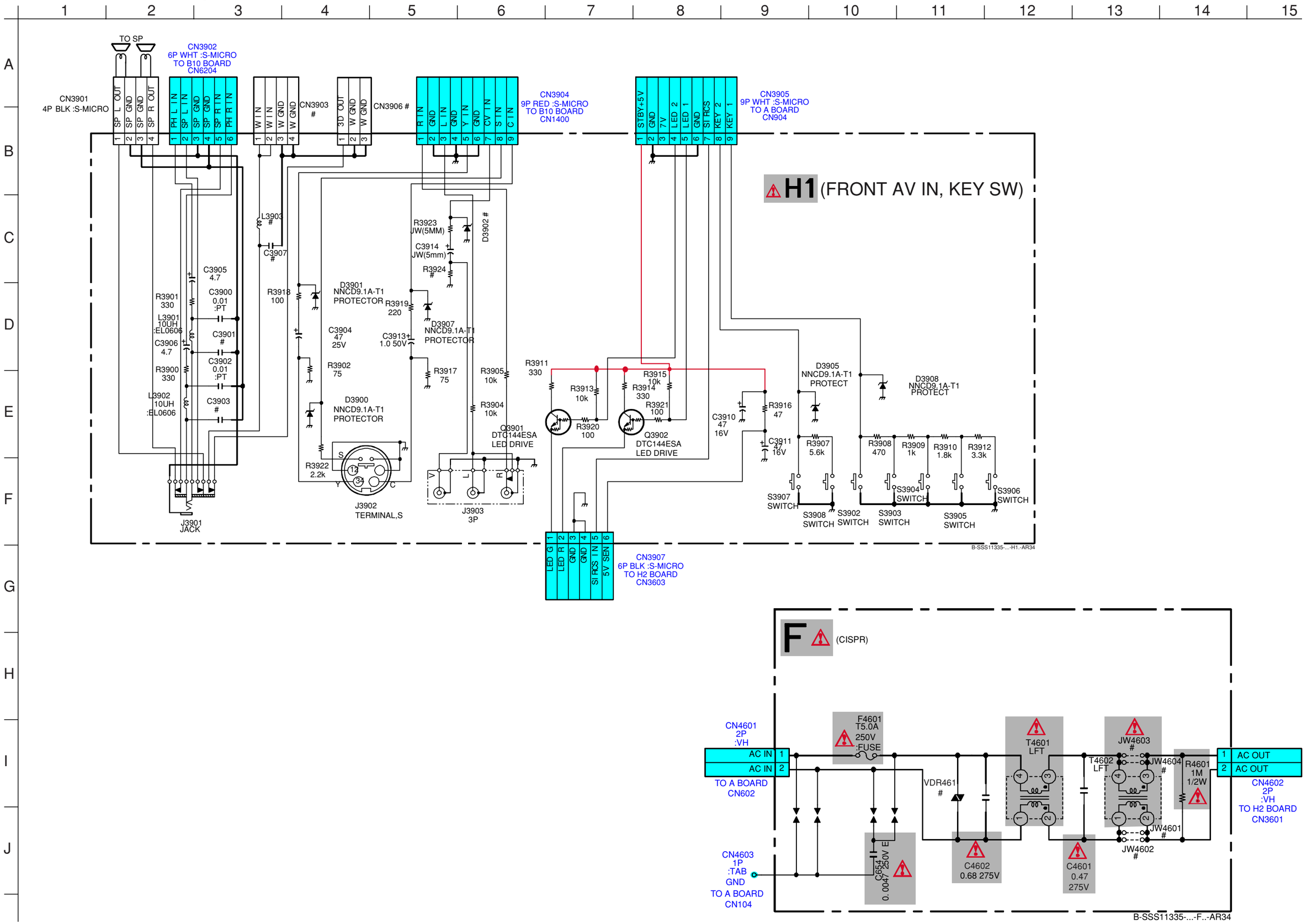
KV-AR34M81/AR34N90
RM-995 RM-996

(3) D2 Board Schematic Diagram



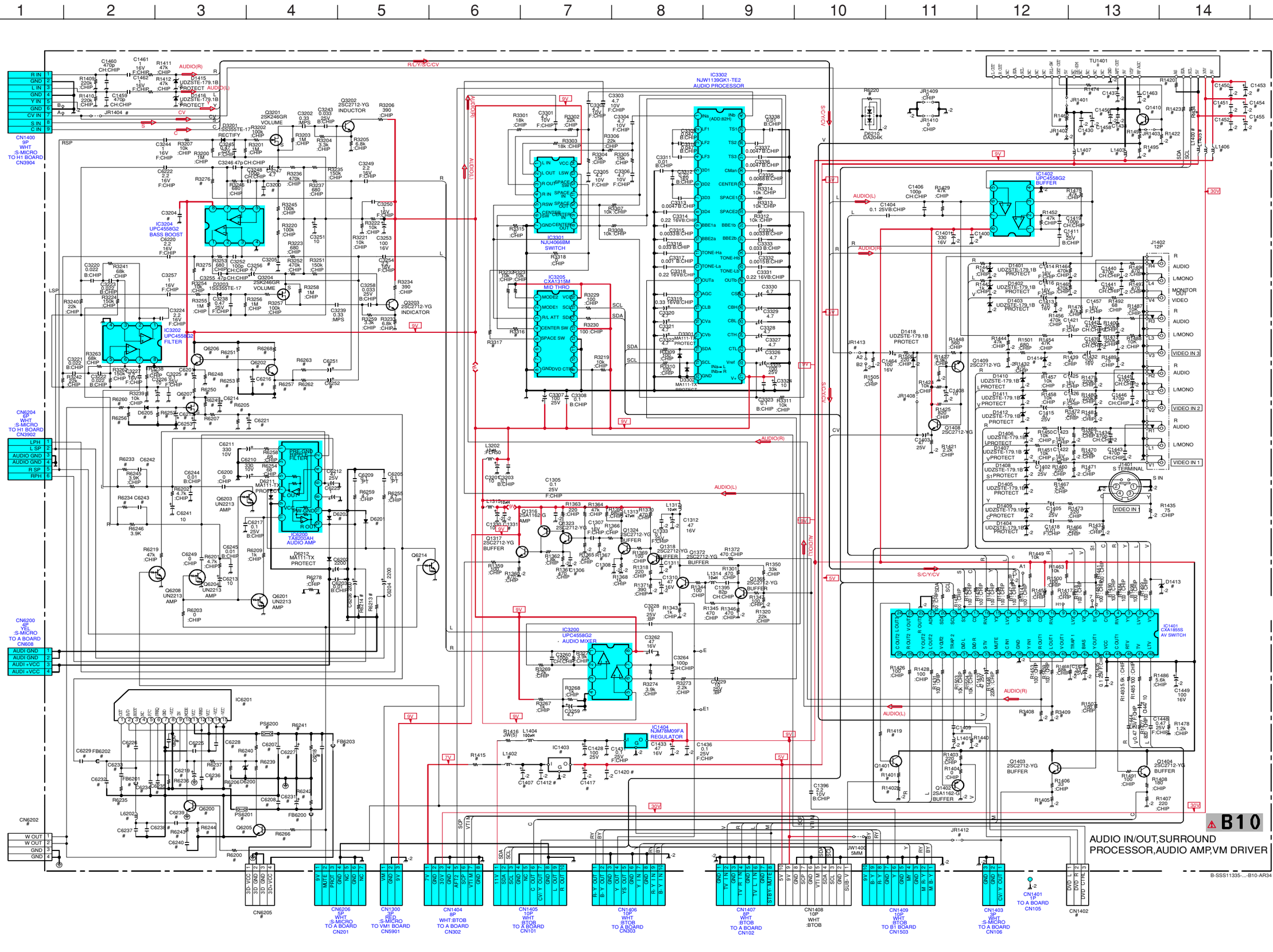
KV-AR34M81/AR34N90 RM-995 RM-996

(4) H1 and F Boards Schematic Diagrams



KV-AR34M81/AR34N90 RM-995 RM-996

(5) B10 Board Schematic Diagram



(8) V1 Board Schematic Diagram

(KV-AR34M81 only)

V1
(TELE TEXT)

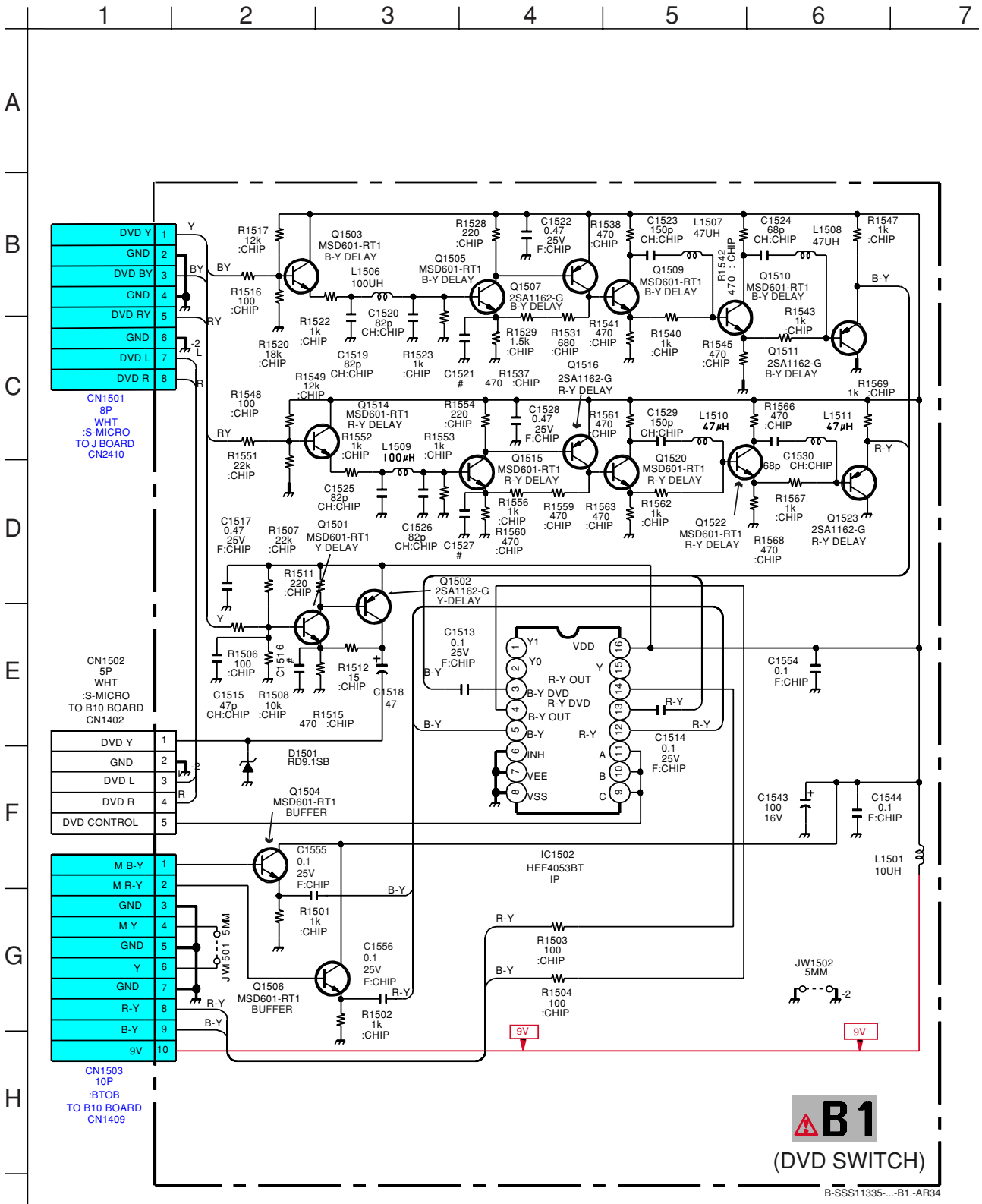
IC801
SAA5261PS/110
TEXT DECODER

CN801
7P
:BTOB
TO A BOARD
CN307

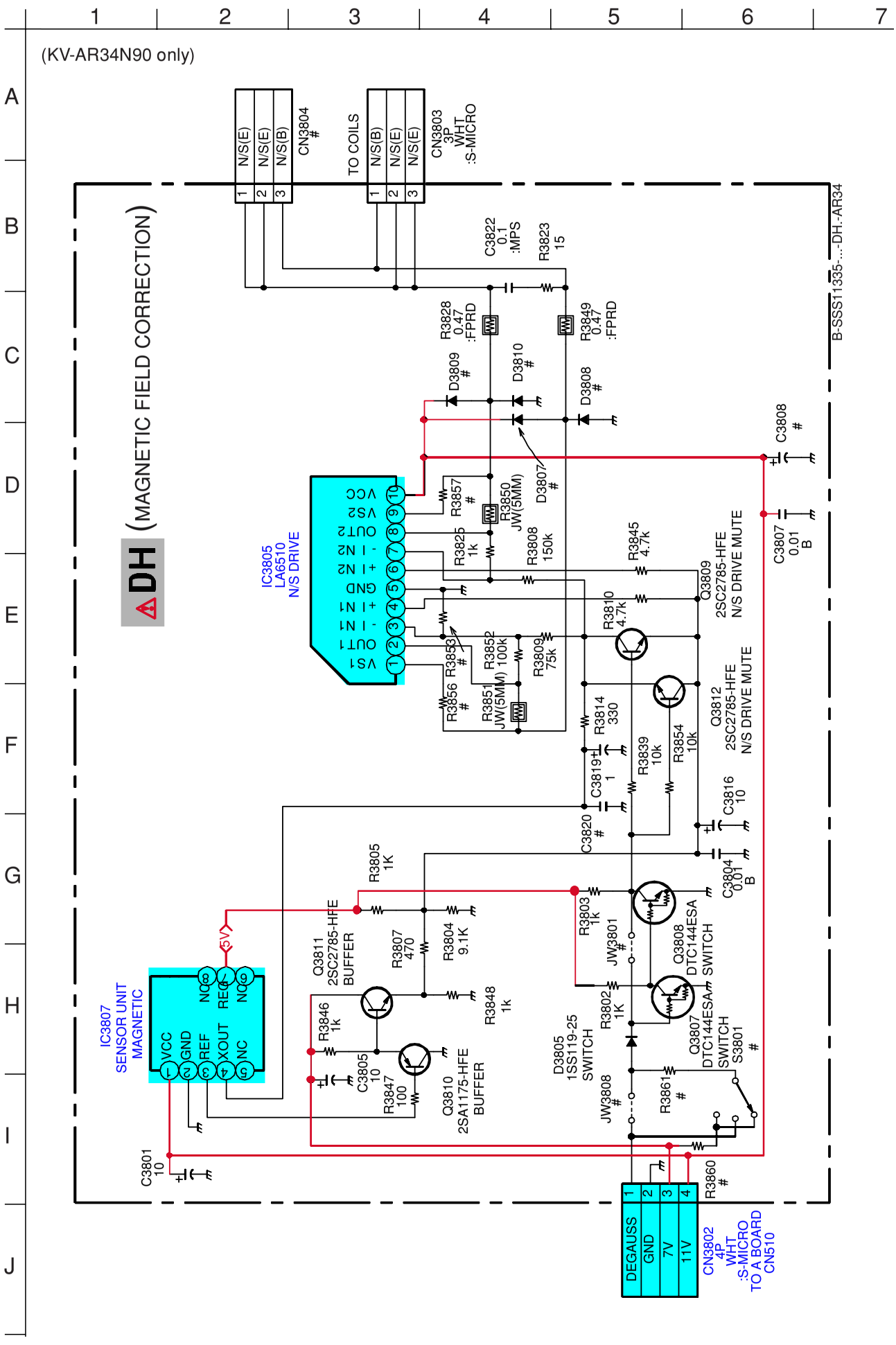
CN803
7P
:BTOB
TO A BOARD
CN301

B-SSS11335-...-V1.-AR34

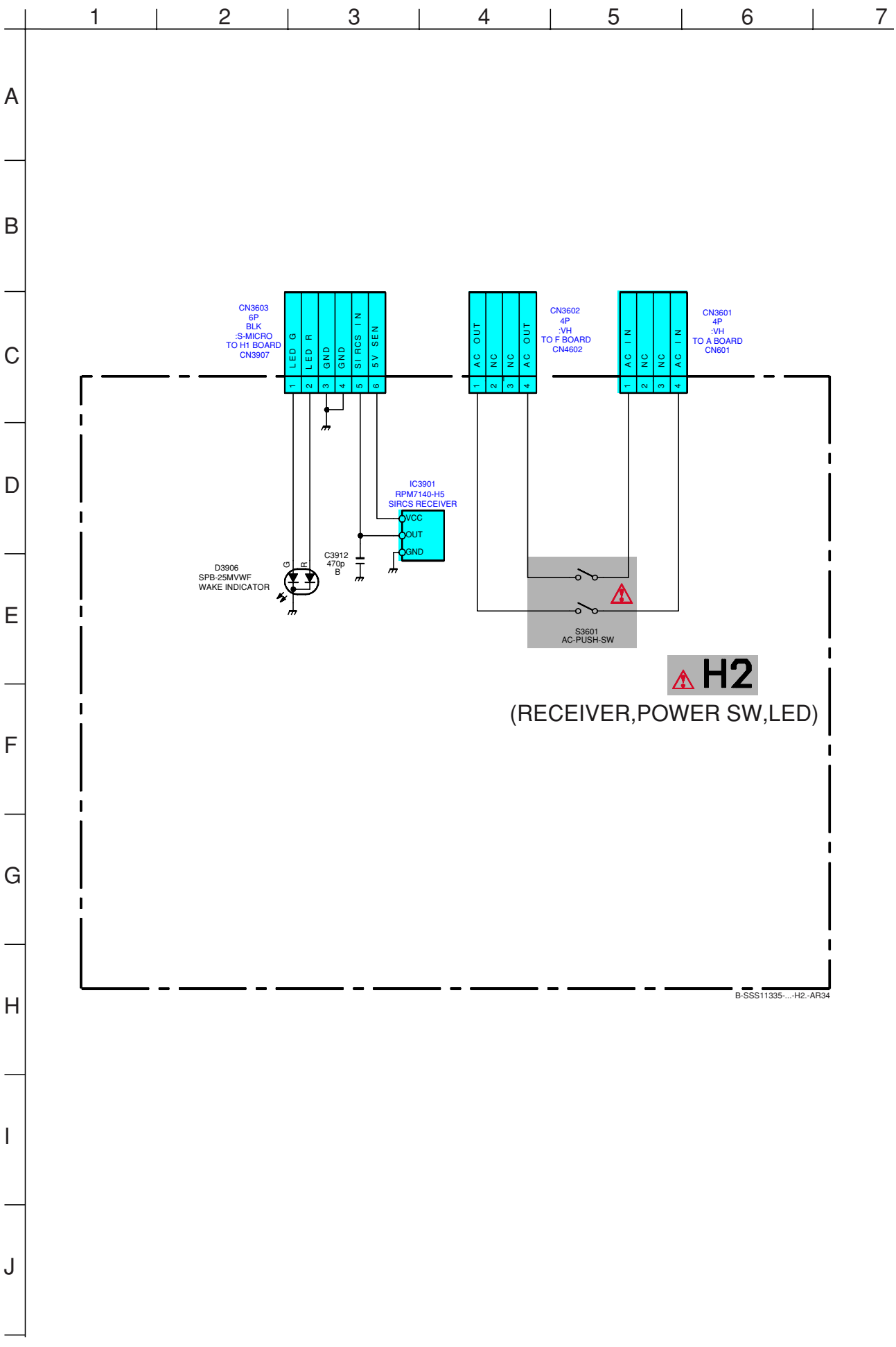
(7) B1 Board Schematic Diagram



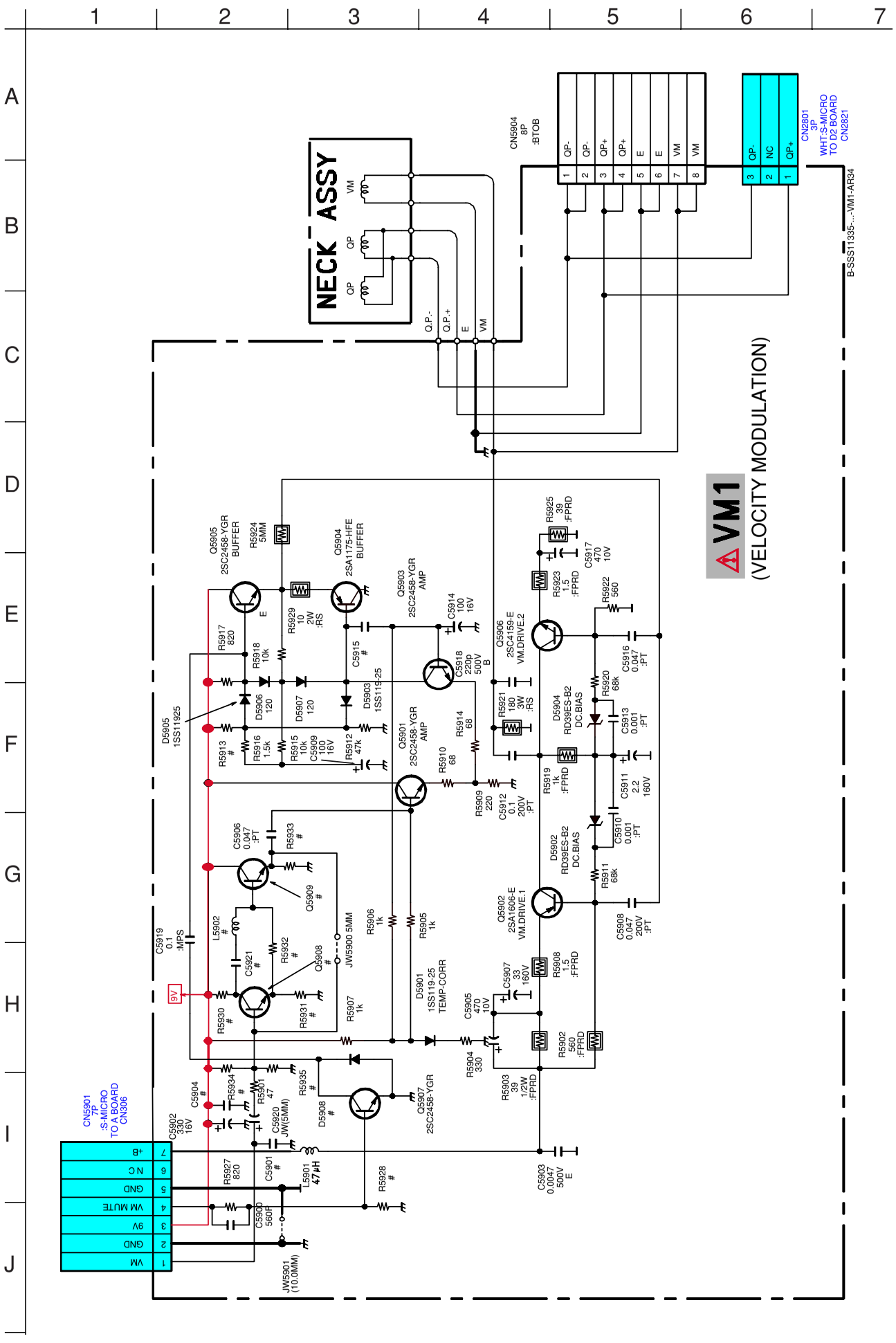
(8) DH Board Schematic Diagram



(9) H2 Board Schematic Diagram



(10) VM1 Board Schematic Diagram



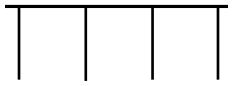
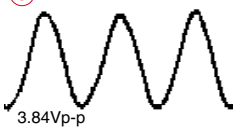
A Board ✲ Mark List

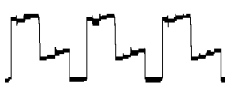
	KV-AR34M81 (ME)	KV-AR34N90 (Taiwan)
C051	100P CH:CHIP	#
C101	#	10
C106	#	0.047P :CHIP
C350	0.01P F :CHIP	#
C613	560 450V	820 250V
C616	0.022 400V :PP	#
C617	100PF 1KV :SL	#
CN301	7P :BTOB	#
CN307	7P :BTOB	#
CN510	#	4P
D609	RU-IP	#
FB613	1.1UH	#
IC001	CXP750097-605S	CXP750097-604S
IC302	TDA9181T	TDA9183T
JR107	#	0 :CHIP
JR108	#	0 :CHIP
JR109	0 :CHIP	#
JR111	#	0 :CHIP
Q309	UN2213	#
R006	#	39K :CHIP
R007	#	220 :CHIP
R009	#	4.7K :CHIP
R028	#	1.0K :CHIP
R030	#	100 :CHIP
R036	100 :CHIP	#
R037	100 :CHIP	15K :CHIP
R038	1.0K :CHIP	#
R103	#	100 :CHIP
R104	#	100 :CHIP
R106	#	1.0K :CHIP
R114	#	4.7K :CHIP
R115	#	4.7K :CHIP
R375	100 :CHIP	#
R382	4.7K :CHIP	#
R620	0.033 630V :PP	0.022 400V :PP
R635	82K 3W :RS	#
R637	82K 3W :RS	#
TU101	BTF-LG 433	BTF-WA421
T503	NX-4009//M3B4	NX-4009//M3P
VDR600	ERZV14D621	TNR14V271K660

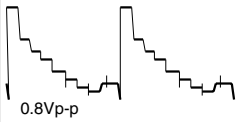
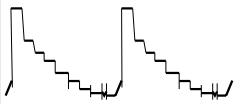
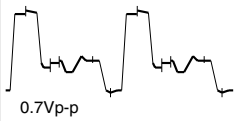
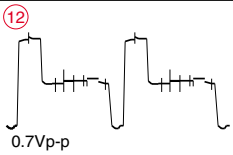
Note: The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

5-4. VOLTAGE LIST AND WAVEFORM

A BOARD VOLTAGE LIST AND WAVEFORM

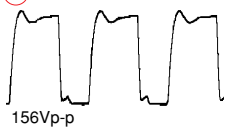
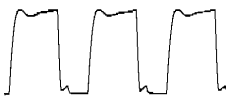
Ref	Pin No.	Voltage[v]
IC001	1	0
	2	4.9
	3	0.2
	4	0.2
	5	4.9
	6	4.9
	7	3.9
	8	4.8
	9	0.4
	① 4.96Vp-p	
	10	0
	②  4.88Vp-p	
	11	4.9
	12	0
	13	2.2
	14	2.1
	③ PAL  3.84Vp-p	
	③ NTSC3.58 4.24Vp-p	
	15	4.9
	16	4.9
	17	0
	18	4.9
	19	2.2
	20	0.3
	21	4.9
	22	0
	23	4.9
	24	(0.3)[0.2]
	25	4.8
	26	4.9
	27	4.8
	28	4.9
	29	0
	30	0
	31	0
	32	0
	33	4.9
	34	0
	35	0
	36	2.5
	37	2.5
	38	4.8
	39	4.9
	40	0
	41	0.2
	42	0.2
	43	0
	44	4.9
	45	4.9
	46	4.6
	47	4.9

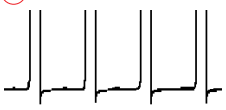
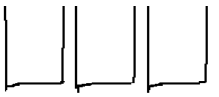
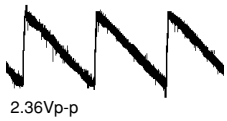
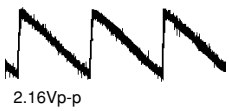
Ref	Pin No.	Voltage[v]
	48	4.4
	49	0
	50	2.2
	51	0
	52	0
IC002	1	0
	2	4.9
	3	4.9
	4	7.2
	5	4.9
	6	0
	7	0
IC003	1	0
	2	0
	3	0
	4	0
	5	4.9
	6	4.9
	7	0
	8	4.9
IC301	1	(3.7)[3.3]
	2	5.0
	3	1.3
	4	5.0
	5	4.8
	6	4.3
	7	1.4
	8	3.5
	9	5.0
	10	3.7
	11	5.0
	12	0
	13	3.7
	14	2.3
	15	3.5
	16	3.4
	④ 1.44Vp-p	
	17	5.3
	18	7.6
	19	0.8
	20	3.4
	21	3.4
	22	3.8
	23	3.2
	24	1.8
	⑤ 3.92Vp-p	
	25	1.8
	⑥  3.44Vp-p	
	26	(1.7)[1.9]
	⑦ 3.84Vp-p	
	27	0

Ref	Pin No.	Voltage[v]
	28	4.4
	29	4.4
	30	4.4
	31	8.6
	32	4.0
	⑧ PAL  0.8Vp-p	
	⑧ NTSC3.58  0.7Vp-p	
	33	4.0
	⑨ PAL 0.8Vp-p	
	⑨ NTSC3.58  0.7Vp-p	
	34	3.5
	⑩ PAL 800mVp-p	
	⑩ NTSC3.58 680mVp-p	
	35	8.6
	36	4.5
	37	4.6
	38	4.6
	39	4.6
	⑪ 5.12Vp-p	
	40	5.1
	⑫  0.7Vp-p	

A BOARD VOLTAGE LIST AND WAVEFORM

Ref	Pin No.	Voltage[v]
	41	5.1
	(13) PAL 840mVp-p	
	(13) NTSC3.58 720mVp-p	
	42	0
	43	5.0
	44	4.8
	45	(5.3)[5.5]
	46	5.0
	47	8.6
	48	0.2
	49	4.4
	50	0
	51	(2.6)[2.3]
	52	(2.3)[1.8]
IC302	1	1.5
	2	0
	3	1.4
	4	0
	5	1.6
	6	0
	7	4.7
	8	0.6
	9	0
	10	1.0
	11	4.9
	12	4.8
	13	0
	14	1.0
	15	0
	16	0.8
IC601	1	2.1
	2	0
	3	185.0
	4	17.0
	5	0
IC603	I	12.7
	G	0
	O	8.8
IC604	I	8.2
	G	0
	O	4.9
Q001	B	4.9
	C	0
	E	0.2
Q002	B	0
	C	4.9
	E	0
Q101	B	3.5
	C	8.7
	E	2.9
Q301	B	12.6
	C	0
	E	12.5
Q302	B	1.5
	C	8.0
	E	0.8
Q303	B	8.0
	C	1.4
	E	8.6
Q304	B	3.5
	C	0
	E	4.2

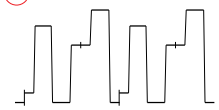
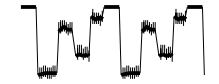
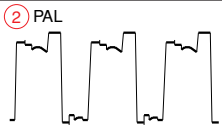
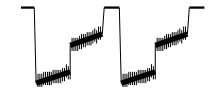
Ref	Pin No.	Voltage[v]
Q305	B	8.0
	C	1.6
	E	8.6
Q306	B	1.4
	C	8.6
	E	0.8
Q307	B	4.3
	C	8.6
	E	3.5
Q308	B	3.5
	C	0.4
	E	0.8
Q309	B	4.7
	C	0
	E	0
Q310	B	0.2
	C	4.9
	E	0
Q311	B	0
	C	8.8
	E	0
Q312	B	4.4
	C	0
	E	5.6
Q313	B	0
	C	12.5
	E	0
Q314	B	0.4
	C	0
	E	1.0
Q315	B	0
	C	3.5
	E	0
Q316	B	4.0
	C	0
	E	4.7
Q317	B	4.0
	C	0
	E	4.7
Q501	B	3.4
	C	0
	E	4.0
Q502	B	4.3
	C	1.5
	E	4.0
Q503	B	0
	C	3.3
	E	0
Q505	S	0
	G	(6.3)[6.1]
	D	156
Q506	B	0.6
	C	92.1
	(14) PAL  156Vp-p	
	(14) NTSC3.58  148Vp-p	
	E	0
Q507	B	12.5
	C	0.3
	E	13.0
Q509	B	0.6
	C	0
	E	0

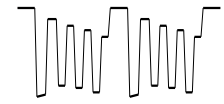
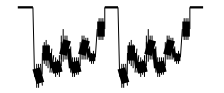
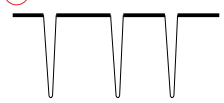
Ref	Pin No.	Voltage[v]
Q511	B	1.1
	C	0
	(15) PAL  366Vp-p	
	(15) NTSC3.58  322Vp-p	
	E	1.2
Q600	B	0
	C	12.7
	E	0
Q601	B	0.6
	C	0.3
	E	0.6
Q602	B	0
	C	17.0
	E	0
Q603	B	17.0
	C	(3.2)[3.5]
	E	17.0
Q604	B	134.2
	C	0
	E	134.6
Q605	S	0.6
	G	0
	D	266.0
Q606	B	0
	C	0.2
	E	0.6
Q607	B	(1.8)[1.5]
	C	1.3
	E	(1.5)[1.1]
Q608	B	0
	C	0.8
	E	0
	(16) PAL  2.36Vp-p	
	(16) NTSC3.58  2.16Vp-p	

B10 BOARD VOLTAGE LIST

Ref	Pin No.	Voltage[v]
IC1401	1	3.8
	2	3.9
	3	3.8
	4	3.9
	5	3.8
	6	8.2
	7	3.8
	8	3.9
	9	3.8
	10	3.9
	11	3.8
	12	8.2
	13	3.9
	14	3.9
	15	3.8
	16	3.9
	17	3.8
	18	8.1
	19	4.3
	20	4.4
	21	0
	22	3.9
	23	3.8
	24	3.9
	25	3.8
	26	3.9
	27	3.8
	28	3.9
	29	3.8
	30	3.8
	31	3.9
	32	3.9
	33	3.8
	34	0
	35	3.8
	36	0
	37	3.8
	38	3.9
	39	3.9
	40	3.8
	41	3.8
	42	3.9
	43	3.7
	44	8.8
	45	3.8
	46	3.9
	47	3.9
	48	3.8
IC1402	1	4.9
	2	2.5
	3	2.5
	4	0
	5	8.8
	6	5.0
	7	2.5
	8	2.5
IC1404	I	12.1
	G	0
	O	8.8
IC3200	1	4.4
	2	4.4
	3	4.4
	4	0
	5	4.4
	6	4.4
	7	4.4
	8	8.9
IC3202	1	4.4
	2	4.4
	3	4.4
	4	0
	5	4.4
	6	4.4
	7	4.4
	8	8.9
IC3204	1	4.5
	2	4.5
	3	4.4
	4	0
	5	4.4
	6	4.5
	7	4.5
	8	8.8
IC3205	1	8.8
	2	0.1
	3	0.4
	4	0.4
	5	0.4
	6	0.4
	7	0.3
	8	0
	9	0.1
	10	2.4
	11	0
	12	0
	13	8.7
	14	4.4
	15	4.4
	16	8.8
IC3301	1	2.7
	2	2.6
	3	3.0
	4	3.0
	5	0.4
	6	0
	7	0
	8	0
	9	4.5
	10	4.5
	11	4.5
	12	0
	13	0.4
	14	8.8
IC3302	1	4.4
	2	4.5
	3	4.5
	4	4.5
	5	4.5
	6	4.5
	7	4.5
	8	4.5
	9	4.5
	10	4.4
	11	4.4
	12	4.5
	13	4.5
	14	1.5
	15	1.7
	16	2.7
	17	2.7
	18	4.4
	19	*
	20	0
	21	8.9
	22	4.5
	23	2.5
	24	2.1
	25	2.1
	26	2.1
	27	2.0
	28	4.5
	29	4.4
	30	4.3
	31	4.4
	32	4.5
	33	4.4
	34	4.5
	35	4.5
	36	4.4
	37	4.4
	38	4.5
	39	4.4
	40	4.4
IC6200	1	1.5
	2	0
	3	0
	4	0
	5	1.6
	6	8.7
	7	12.3
	8	5.0
	9	25.8
	10	0
	11	4.2
	12	12.0
Q1316	B	8.8
	C	4.6
	E	8.2
Q1317	B	3.9
	C	8.7
	E	4.6
Q1318	B	3.5
	C	6.1
	E	4.2
Q1323	B	2.0
	C	8.2
	E	2.7
Q1324	B	5.4
	C	8.8
	E	6.1
Q1365	B	3.5
	C	5.3
	E	4.2
Q1372	B	2.8
	C	8.8
	E	3.5
Q1401	B	0
	C	8.8
	E	0
Q1402	B	4.5
	C	0
	E	3.8
Q1403	B	3.1
	C	8.8
	E	3.7
Q1404	B	3.2
	C	8.8
	E	3.8
Q1408	B	5.2
	C	8.8
	E	5.8
Q1409	B	1.8
	C	5.8
	E	2.5
Q3201	S	4.4
	G	4.2
	D	4.3
Q3202	B	3.6
	C	8.6
	E	4.1
Q3203	B	3.6
	C	8.6
	E	4.1
Q3204	S	3.6
	G	4.0
	D	4.4
Q6201	B	0
	C	4.2
	E	0
Q6206	B	0
	C	8.8
	E	0
Q6208	B	0
	C	8.6
	E	0

C6 BOARD VOLTAGE LIST AND WAVEFORM

Ref	Pin No.	Voltage[v]
IC1800	1	6.5
	2	6.5
	3	6.5
	4	6.4
	5	0
	6	6.4
	7	6.4
	8	6.4
	9	6.4
	10	12.6
J701	KR	153
	① PAL  122Vp-p	
	① NTSC3.58  127Vp-p	
	KG	148
	② PAL  127Vp-p	
	② NTSC3.58  125Vp-p	

Ref	Pin No.	Voltage[v]
	KB	155
	③ PAL  135Vp-p	
	③ NTSC3.58  133Vp-p	
	H2	0.3
	④  22.4Vp-p	
	G2	284
Q701	B	154
	C	206
	E	157
Q702	B	151
	C	206
	E	151
Q703	B	151
	C	206
	E	153
Q704	B	8.9
	C	154
	E	8.3

Ref	Pin No.	Voltage[v]
Q705	B	8.9
	C	153
	E	8.3
Q706	B	8.9
	C	152
	E	8.3
Q707	B	115
	C	5.4
	E	156
Q708	B	(151)[146]
	C	6.0
	E	150
Q709	B	154
	C	5.4
	E	154
Q710	B	1.6
	C	8.3
	E	1.3
Q711	B	1.8
	C	8.2
	E	1.4
Q712	B	1.6
	C	8.3
	E	1.3
Q714	B	0.7
	C	0.1
	E	0
Q1800	B	3.8
	C	0
	E	4.5
Q1802	B	0.4
	C	3.4
	E	0
Q1803	B	0
	C	6.5
	E	0

VM1 BOARD VOLTAGE LIST

Ref	Pin No.	Voltage[v]
Q5901	B	2.7
	C	8.8
	E	2.0
Q5902	B	0.7
	C	0.4
	E	0.7
Q5903	B	2.7
	C	4.6
	E	2.0
Q5904	B	4.6
	C	0
	E	5.1
Q5905	B	5.6
	C	8.8
	E	5.1

Ref	Pin No.	Voltage[v]
Q5906	B	0
	C	0.3
	E	0
Q5907	B	0.1
	C	0.7
	E	0
Q5908	B	3.8
	C	0
	E	0
Q5909	B	0
	C	8.8
	E	3.8

H1/H2 BOARD VOLTAGE LIST

Ref	Pin No.	Voltage[v]
IC3901	1	(4.9)[4.8]
	2	(0)[4.9]
	3	(4.8)[0]
Q3901	B	0.1
	C	4.9
	E	0.2
Q3902	B	(4.7)[0]
	C	(2.4)[4.9]
	E	(2.0)[0.1]

V1 BOARD VOLTAGE LIST (KV-AR34M81)

Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]
IC801	1	0.5		30	2.0	Q803	B	0
	2	4.8		31	2.0		C	0.01
	3	(0.4)[0.7]		32	0.02		E	0.6
	4	(0.4)[0.7]		33	0.02	Q805	B	0
	5	4.8		34	0.02		C	1.0
	6	(0.3)[0.9]		35	0		E	0.3
	7	(0.3)[0.9]		36	1.0	Q806	B	0
	8	(0.3)[0.9]		37	0.2		C	4.8
	9	0		38	4.8		E	0.02
	10	0		39	4.8	Q807	B	0
	11	0		40	0.02		C	4.8
	12	0		41	2.2		E	0.02
	13	0		42	2.2	Q808	B	0
	14	0		43	0.02		C	4.8
	15	0		44	4.6		E	0.02
	16	0		45	0	Q810	B	2.0
	17	0		46	0		C	4.0
	18	0		47	4.8		E	0.2
	19	0		48	0	Q811	B	4.8
	20	1.1		49	4.3		C	6.5
	21	1.1		50	4.5		E	5.5
	22	0		51	0	Q815	B	0
	23	2.1		52	0		C	4.8
	24	1.2	Q801	B	0		E	0.03
	25	2.0		C	4.8	Q817	B	0
	26	2.4		E	0.02		C	0.2
	27	0.02	Q802	B	2.0		E	2.8
	28	0		C	4.9			
	29	0.9		E	0			

D2 BOARD VOLTAGE LIST

Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]
IC2801	1	5.7		7	4.4	Q2811	B	5.7
	2	6.3		8	4.4		C	0
	3	6.3	Q2802	B	1.6		E	5.5
	4	0		C	0	Q2813	B	2.3
	5	6.4		E	2.3		C	12
	6	6.3	Q2805	B	1.6		E	1.8
	7	0		C	0	Q2822	B	11.5
	8	14.8		E	1.6		C	12.1
IC2805	1	0	Q2806	B	1.6		E	3.3
	2	0		C	8.1	Q2823	B	3.3
	3	0		E	1.6		C	12.1
	4	0	Q2807	B	1.4		E	2.7
	5	4.4		C	0			
	6	4.4		E	0			

DH BOARD VOLTAGE LIST (KV-AR34N90)

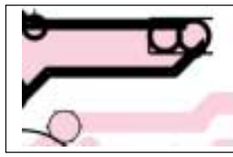
Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]
IC3805	1	4.8		4	1.2	Q3809	B	0.1
	2	5.2		5	0		C	1.3
	3	2.8		6	0		E	0
	4	2.8		7	4.9	Q3810	B	2.5
	5	0		8	0		C	0
	6	2.8	Q3807	B	0		E	3.2
	7	2.8		C	4.8	Q3811	B	3.2
	8	2.8		E	0		C	7.2
	9	2.4	Q3808	B	4.8		E	2.6
	8	7.1		C	0.1	Q3812	B	0.1
IC3807	1	12.2		E	0		C	2.8
	2	0					E	1.3
	3	2.5						

KV-AR34M81/AR34N90
RM-995 RM-996

5-5. PRINTED WIRING BOARDS AND PARTS LOCATION

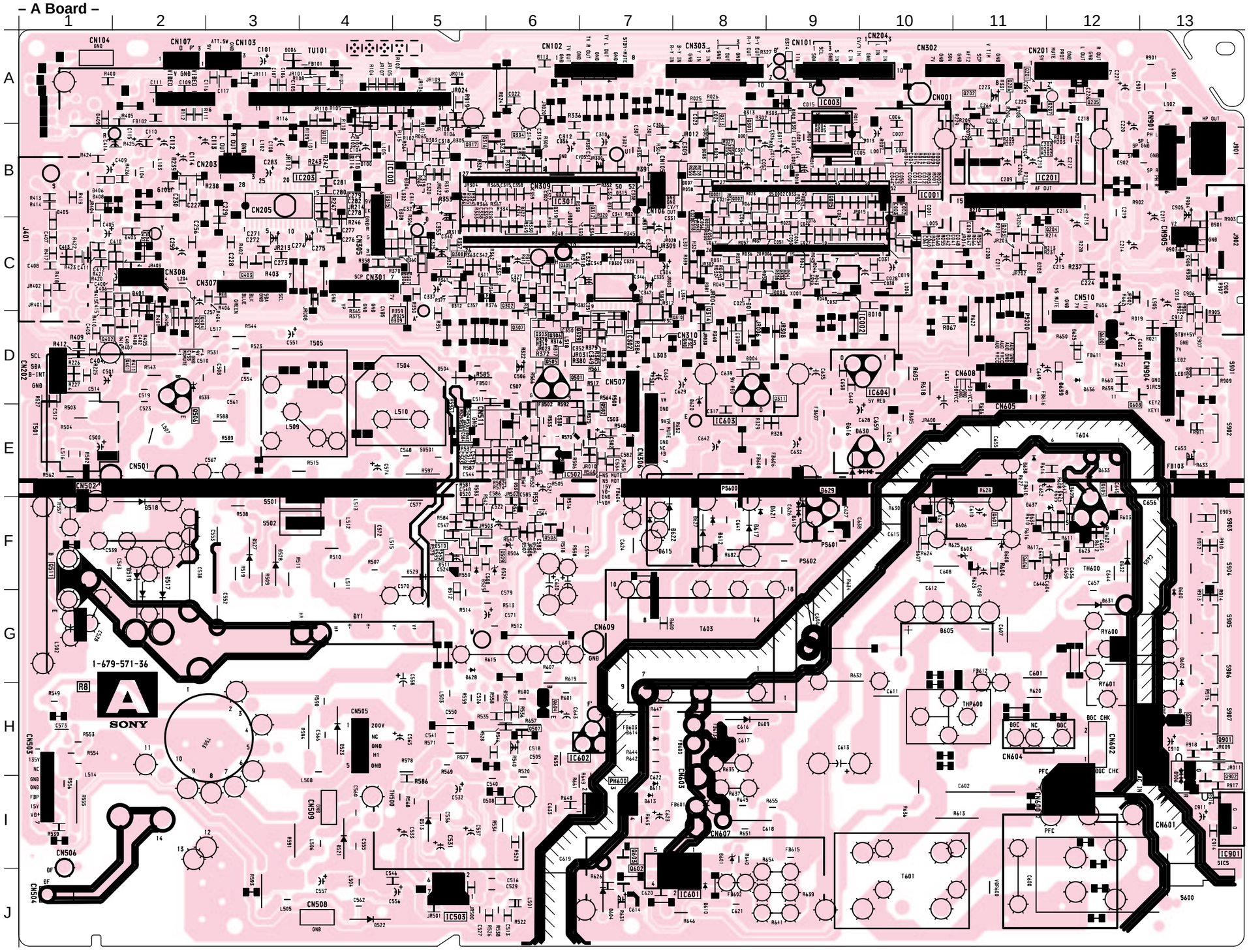
PRINTED WIRING BOARDS

A [SYSTEM CONTROLLER, Y/C JUNGLE, DEFLECTION, TUVIF, FRONT AMP, POWER SUPPLY]



NOTE:
The circuit indicated at left contains high voltage of over 1220 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

– A Board –



A BOARD

IC

IC001	B-10
IC002	D-10
IC003	A-9
IC100	B-4
IC201	B-12
IC203	B-4
IC301	B-6
IC302	D-7
IC502	E-6
IC503	J-5
IC601	J-8
IC602	H-7
IC604	D-10
IC901	I-13
PH600	1-7

TRANSISTOR

Q001	B-8
Q002	B-8
Q005	B-9
Q101	B-4
Q201	A-11
Q202	A-11
Q203	C-11
Q204	C-12
Q205	A-12
Q206	A-11
Q207	A-12
Q301	B-8
Q302	C-6
Q303	D-6
Q304	B-6
Q305	C-6
Q306	D-6
Q307	D-6
Q308	C-5
Q309	D-6
Q310	D-8
Q311	D-9
Q312	B-7
Q313	A-8
Q314	D-8
Q315	B-4
Q316	B-5
Q317	B-5
Q401	D-2
Q402	D-1
Q403	C-3
Q404	D-2
Q501	D-6
Q502	E-7
Q503	F-6
Q505	D-6
Q506	E-2
Q507	H-6
Q509	F-6
Q511	F-1
Q600	D-12
Q601	F-11
Q602	I-7
Q603	I-7
Q604	H-6
Q605	E-12
Q606	F-11
Q607	H-13
Q608	E-12
Q901	H-13
Q902	H-13

DIODE

D001	B-8
D002	B-9
D003	C-9
D004	D-8
D005	C-8
D006	A-3
D007	B-8
D008	B-8
D010	D-10
D011	C-8
D100	B-4
D203	C-11
D300	A-9
D301	B-9
D303	B-5
D304	B-5
D305	B-5
D306	C-5
D307	C-5
D308	B-5
D309	D-5
D311	C-5
D312	C-5
D313	A-8
D314	A-9
D315	B-7
D317	B-9
D319	B-6
D320	C-5
D321	B-6
D322	B-6
D401	C-2
D402	D-2
D403	C-2
D404	C-2
D405	B-1
D406	B-1
D407	C-2
D408	B-1
D409	A-1
D504	D-5
D505	H-6
D506	F-6
D507	F-6
D508	I-6
D509	F-6
D510	F-5
D511	F-5
D512	G-5
D513	I-5
D517	F-2
D518	F-2
D519	F-2
D520	E-5
D521	I-4
D522	J-4
D523	H-4
D525	F-5
D526	F-6
D527	F-3
D528	F-3
D529	F-5
D531	E-6
D532	E-5
D533	D-3
D534	E-6
D600	G-13
D601	I-8
D602	G-13
D603	F-11
D604	J-7
D605	G-10
D606	F-11
D607	F-10
D608	F-11
D609	H-8
D610	J-8
D611	I-7
D612	F-8
D613	I-7
D614	H-7
D615	F-7
D616	E-9
D617	F-8
D618	F-9
D620	D-8
D621	F-9
D622	F-7
D623	F-12
D624	E-12
D625	D-12
D627	F-8
D628	G-5
D628	G-5
D629	E-9
D630	E-10
D631	G-12
D632	F-12
D633	E-12
D634	F-11
D635	E-12
D636	D-13
D637	F-11
D638	E-11
D639	D-12
D901	C-13
D902	C-13
D903	C-13
D904	D-13
D905	F-13
D906	H-13

PRINTED WIRING BOARDS

D2 [DYNAMIC FOCUS, DQP]

H2 [RECEIVER, POWER SW, LED]

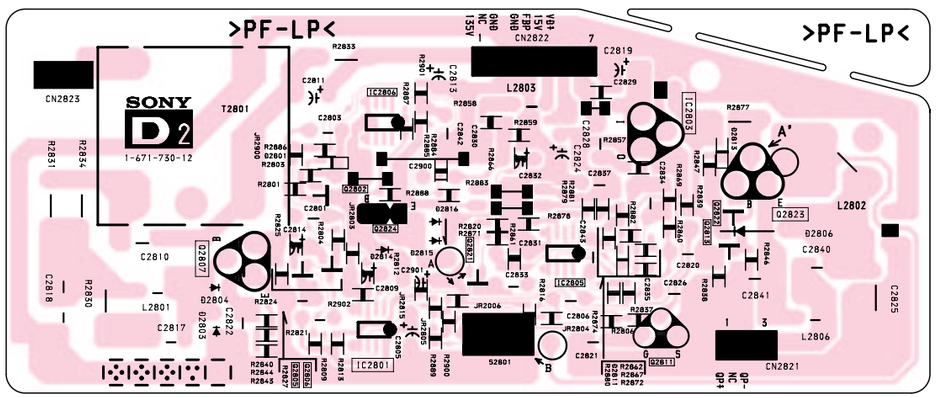
J [DVD TERMINAL]

H1 [FRONT AV IN, KEY SW]

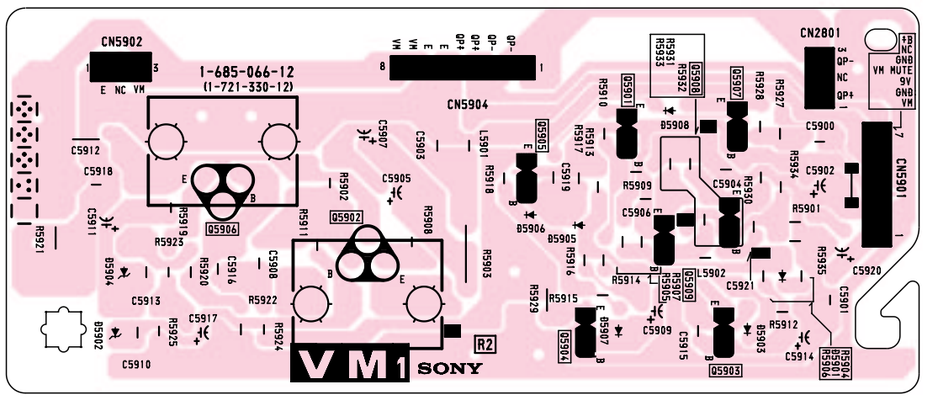
VM1 [VELOCITY MODULATIONM]

DH [MAGNETIC FIELD CORRECTION]

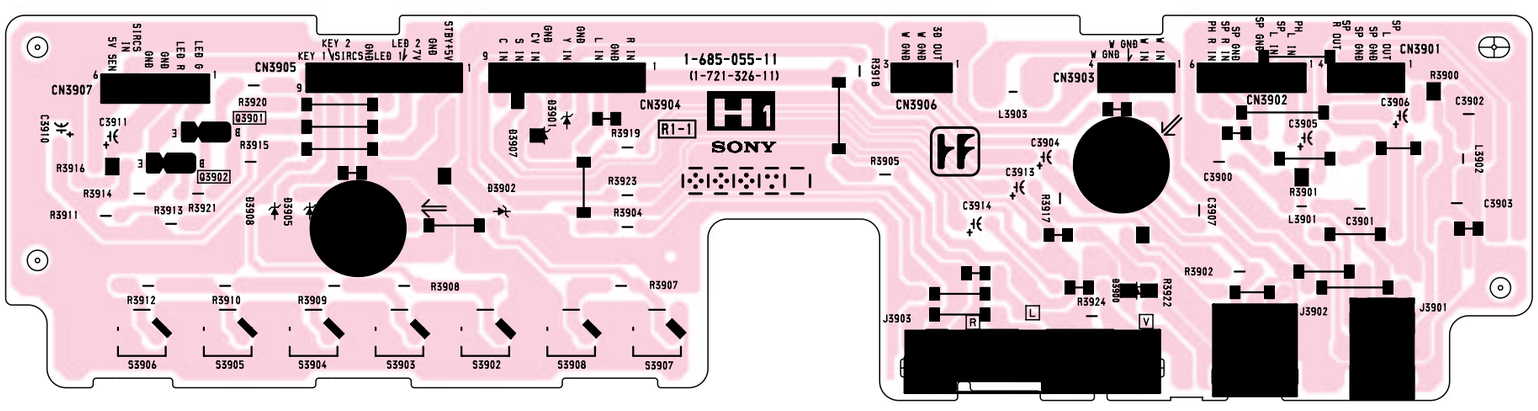
– D2 Board –



– VM1 Board –



– H1 Board –



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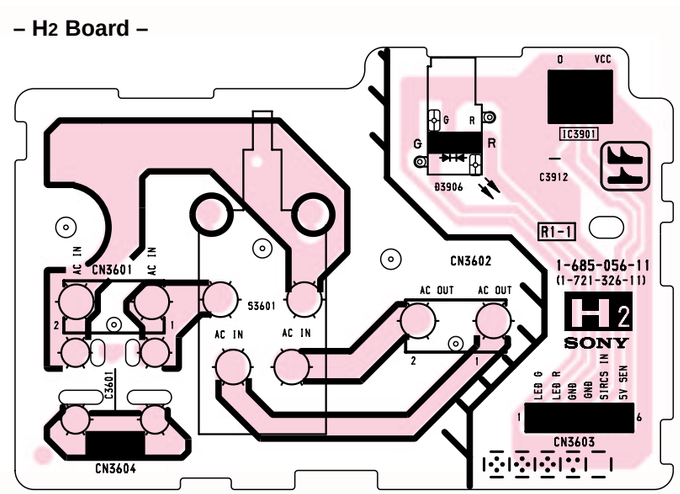
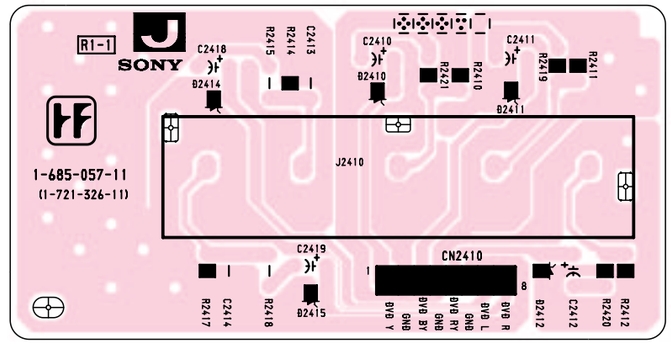
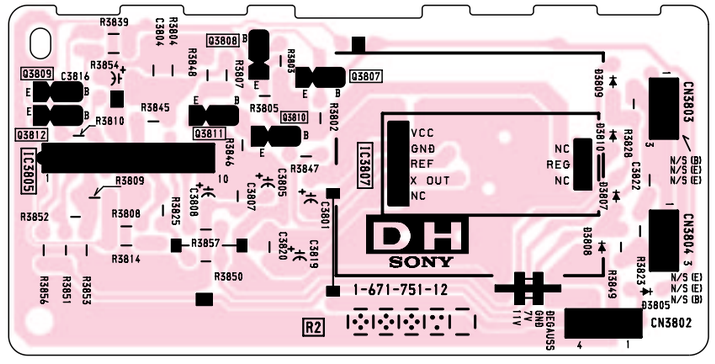


– J Board –



– DH Board – (KV-AR34N90 Only)



KV-AR34M81/AR34N90 RM-995 RM-996

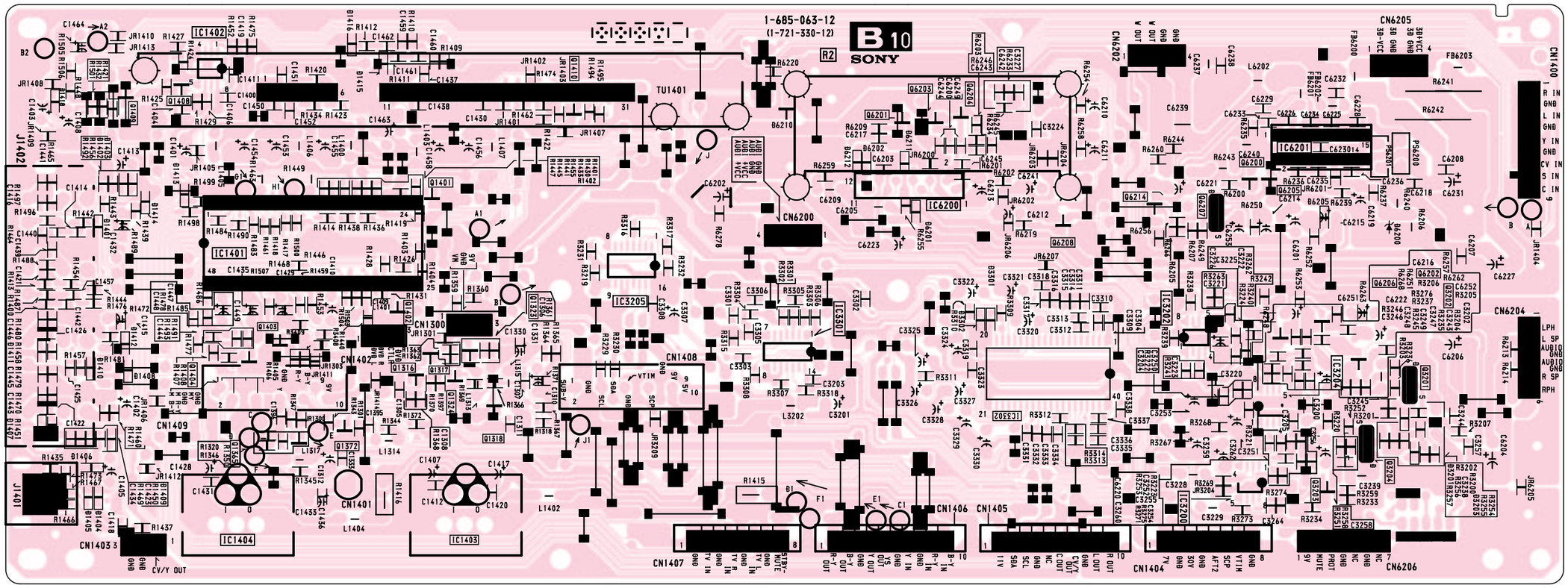
PRINTED WIRING BOARDS

B10 [AUDIO PROCESSOR, AUDIO AMP, SUB TUNER, AV IN/OUT, VM DRIVER]

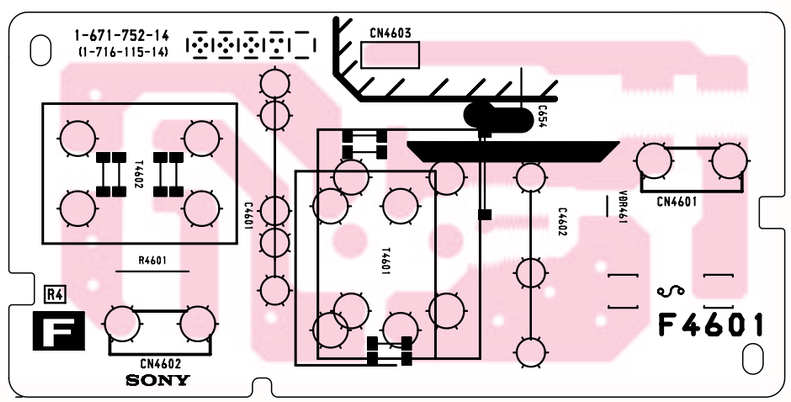
F [CISPR]

V1 [TELETEXT]

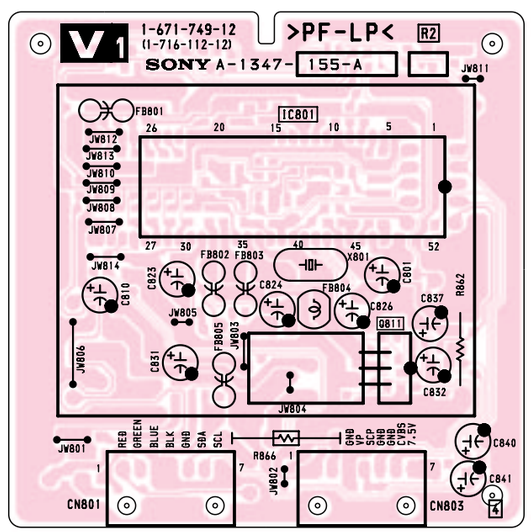
– B10 Board –



– F Board –



– V1 Board – (KV-AR34M81)

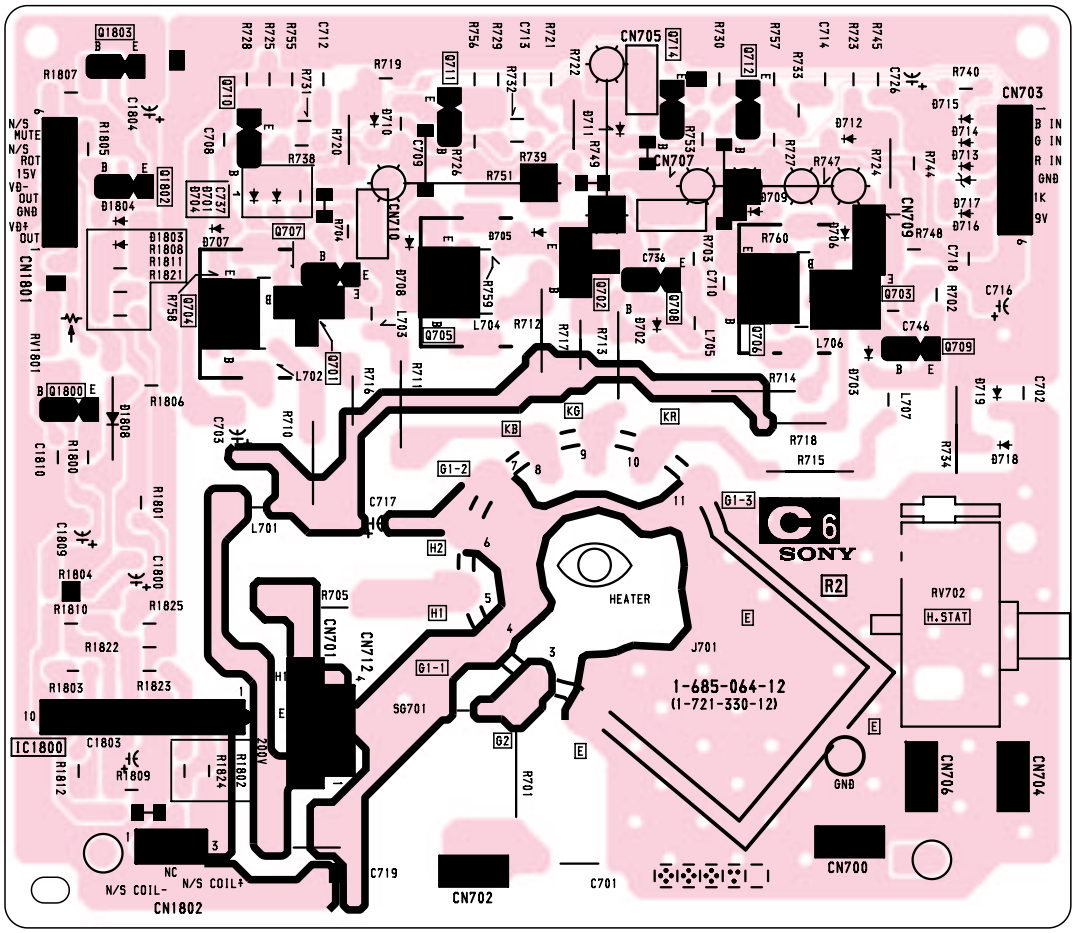


PRINTED WIRING BOARDS

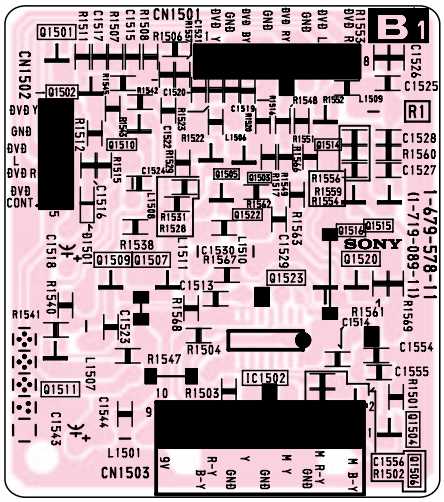
C6 [VIDEO AMP, ROTATION CIRCUIT]

B1 [DVD SWITCH]

– C6 Board –

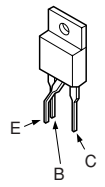
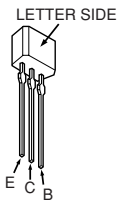
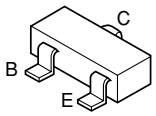
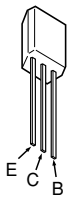
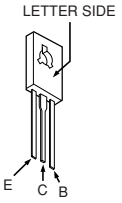
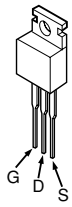


– B1 Board –



5-6. SEMICONDUCTORS

TRANSISTOR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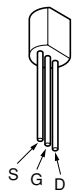	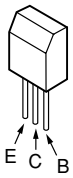	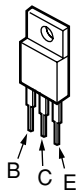	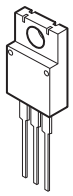	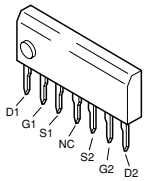	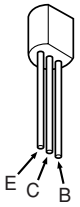
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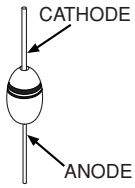
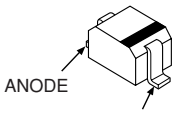
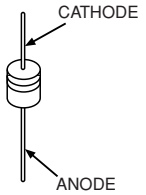
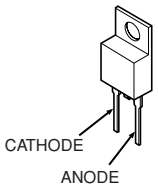
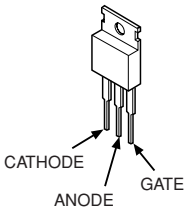
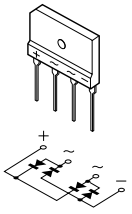
DIODE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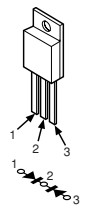	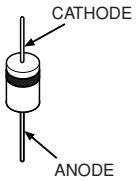	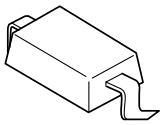	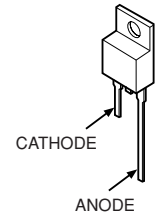	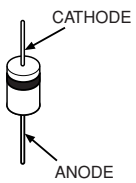	
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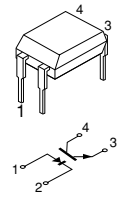
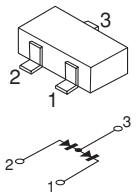
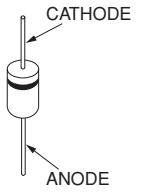
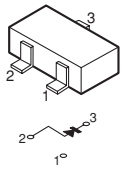
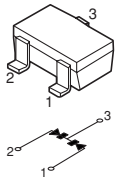
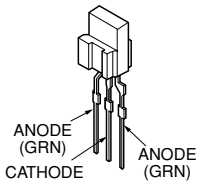
DIODE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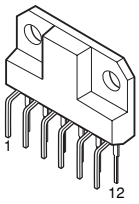
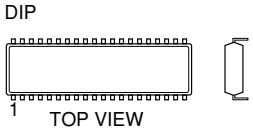
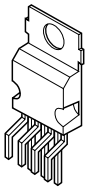
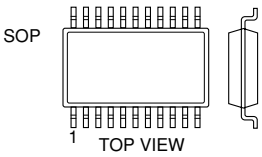
IC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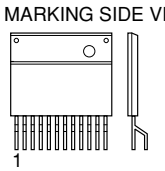		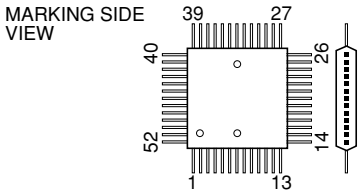		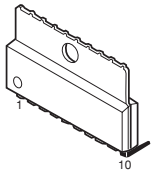	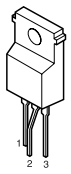
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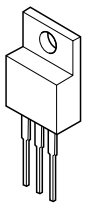


NJM78M09FA
TA7855

SECTION 6
EXPLODED VIEWS

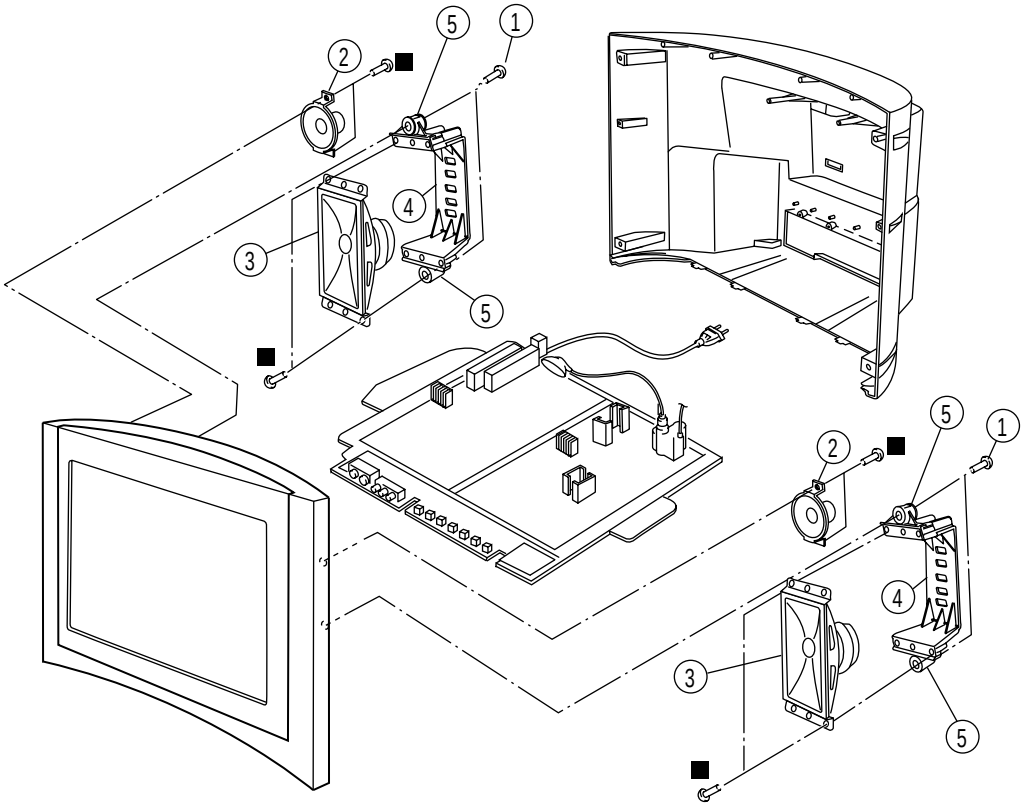
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. SPEAKER BRACKET

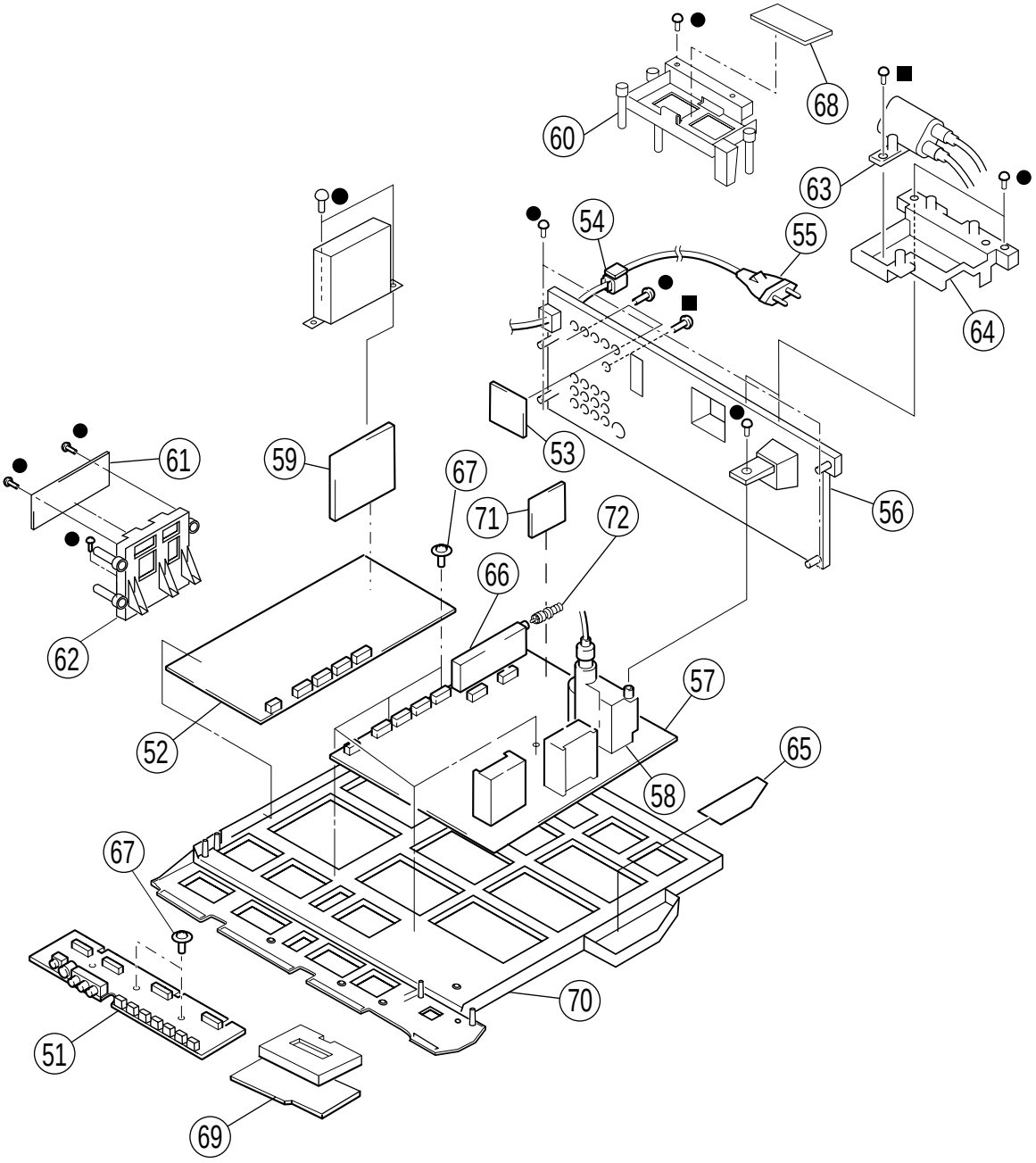
■ : 7-685-663-71 SCREW +BVTP 4 × 16



REF. NO.		PART NO.	DESCRIPTION	REMARK
1		4-302-404-03	SCREW (WASHER HEAD)(+P4 x 16)	
2		1-825-163-11	SPEAKER (5 CM)	
3		1-825-099-11	SPEAKER (13 x 5.5CM)	
4	*	4-086-708-11	BRACKET, SPEAKER	
5		4-374-745-21	CUSHION A	

6-2. CHASSIS

● : 7-685-648-79 SCREW +BVTP 3 × 12
■ : 7-685-663-71 SCREW +BVTP 4 × 16

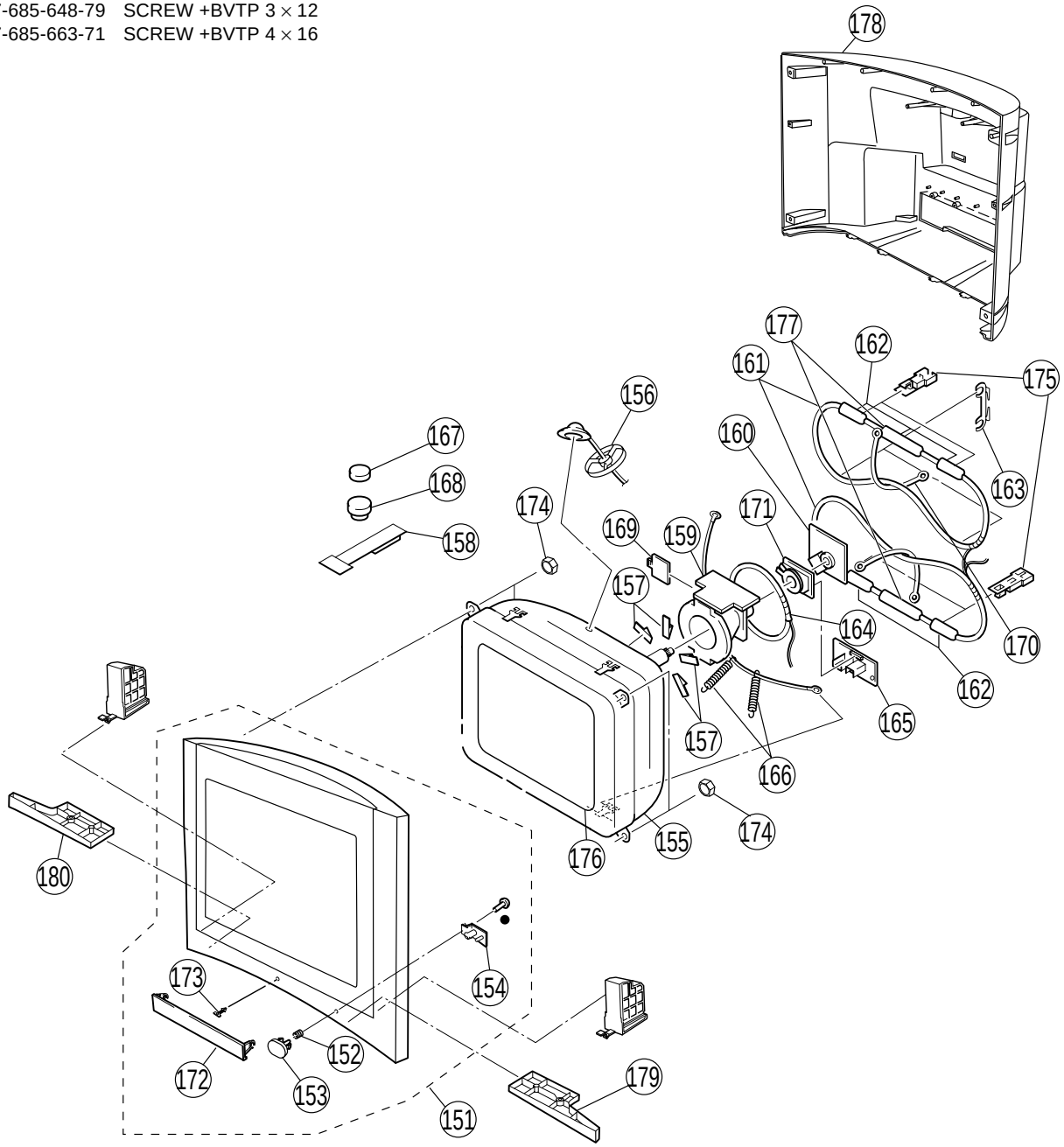


REF. NO.		PART NO.	DESCRIPTION	REMARK
51	*	A-1400-972-A	H1 BOARD MOUNTED	
52	*	A-1300-906-A	B10 BOARD, COMPLETE	
53	*	A-1400-975-A	J BOARD, MOUNTED	
54	⚠	4-022-115-12	HOLDER, AC CORD	
55	⚠	1-823-551-11	CORD, AC POWER (WITH CONNECTOR) (KV-AR34M81)	
	⚠	1-790-130-31	CORD, AC POWER (WITH CONNECTOR) (KV-AR34N90)	
56	*	4-081-023-03	BRACKET, TERMINAL	
57	*	A-1300-805-A	A BOARD, COMPLETE (KV-AR34N90)	
	*	A-1300-905-A	A BOARD, COMPLETE (KV-AR34M81)	
58	⚠	1-453-357-31	TRANSFORMER ASSY, FLYBACK (NX-4009//M3B4) (KV-AR34M81)	
	⚠	1-453-298-11	TRANSFORMER ASSY, FLYBACK (NX-4009//M3P) (KV-AR34N90)	
59	*	A-1131-652-A	B1 BOARD MOUNTED (KV-AR34M81)	
60	*	4-070-963-01	HOLDER PWB (KV-AR34M81)	

REF. NO.		PART NO.	DESCRIPTION	REMARK
61	*	A-1401-812-A	F BOARD MOUNTED (KV-AR34M81)	
	*	A-1241-456-A	F BOARD MOUNTED (KV-AR34N90)	
62	*	4-066-682-01	BRACKET F PWB	
63	⚠	1-467-525-41	CAP BLOCK HIGH VOLTAGE.	
64		4-066-680-02	BRACKET HVC	
65	*	A-1343-979-A	D2 BOARD MOUNTED	
66	⚠	8-598-449-10	TUNER, BTF-LG433 (KV-AR34M81)	
	⚠	8-598-593-20	TUNER, BTF-WA421 (KV-AR34N90)	
67		4-046-797-01	SCREW (3x12)(+)BVTAP	
68	*	A-1333-077-A	DH BOARD MOUNTED (KV-AR34N90)	
69	*	A-1400-973-A	H2 BOARD MOUNTED	
70	*	4-088-700-01	BRACKET MAIN (7 SCREWS (3x12)(+)BVTAP)	
71	*	A-1300-668-A	V1 BOARD COMPLETE (KV-AR34M81)	
72	*	1-573-657-21	PLUG, F-PIN (KV-AR34N90)	

6-3. PICTURE TUBE

●: 7-685-648-79 SCREW +BVTP 3 × 12
■: 7-685-663-71 SCREW +BVTP 4 × 16



REF. NO.		PART NO.	DESCRIPTION	REMARK
151		X-4040-915-1	BEZNET ASSY (KV-AR34M81)	152-154, 172, 173
		X-4040-831-1	BEZNET ASSY (KV-AR34N90)	
152		4-036-405-11	SPRING, COMPRESSION	
153		4-086-448-01	BUTTON, POWER	
154	*	4-086-707-01	GUIDE, LIGHT	
155	⚠	8-735-076-05	PICTURE TUBE (A80LPD90X)	
156	*	3-704-372-11	HOLDER, HV CABLE	
157		4-046-600-11	SPACER, DY	
158		X-4387-214-3	PERMALOY ASSY, CORRECTION	
159	⚠	8-451-499-31	DEFLECTION YOKE (Y34RSA-Y)	
160	*	A-1401-899-A	C6 BOARD, MOUNTED	
161	⚠	1-419-293-11	COIL, DEGAUSSING (KV-AR34M81)	
	⚠	1-419-554-11	COIL, DEGAUSSING (KV-AR34N90)	
162	*	4-074-512-21	CUSHION (S), DGC	
163		4-061-369-01	HOLDER, DEGAUSSE COIL	

REF. NO.		PART NO.	DESCRIPTION	REMARK
164		1-452-896-61	COIL, NA ROTATION (RT200)	
165	*	A-1401-901-A	VM1 BOARD, MOUNTED	
166		4-078-766-01	SPRING, EXTENSION	
167		1-452-032-00	MAGNET DISC	
168		1-452-094-00	CIRCULAR DISC MAGNET	
169		4-077-228-02	PIECE TLH CONVERGENCE	
170		4-067-455-01	BAND, DGC	
171		8-453-007-31	NA324-M3	
172		4-088-697-01	DOOR	
173		4-087-491-11	SPRING (DOOR)	
174		4-387-204-01	NUT, SPECIAL, CRT	
175		4-069-493-03	CLIP DGC	
176		1-416-871-11	COIL LANDING CORRECTION (KV-AR34N90)	
177	*	4-074-513-21	CUSHION (L), DGC	
178		4-089-654-01	COVER REAR (■ 13 SCREWS)	
179	*	4-088-699-01	COVER, BOTTOM (R)	
180		4-088-698-01	COVER, BOTTOM (L)	

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : µF, PF : µµF

COILS
- MMH : mH, UH : µH

REF NO.	PART NO.	DESCRIPTION			REMARK
	* A-1300-905-A	A BOARD COMPLETE (KV-AR34M81)			
	* A-1300-805-A	A BOARD COMPLETE (KV-AR34N90)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		<CAPACITOR>			
C004	1-162-960-11	CERAMIC CHIP	220PF	10.00%	50V
C005	1-162-960-11	CERAMIC CHIP	220PF	10.00%	50V
C006	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C007	1-126-947-11	ELECT	47UF	20.00%	16V
C013	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C014	1-126-947-11	ELECT	47UF	20.00%	25V
C015	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C016	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C017	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C018	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C019	1-126-947-11	ELECT	47UF	20.00%	25V
C020	1-163-259-91	CERAMIC CHIP	220PF	5.00%	50V
C022	1-162-915-11	CERAMIC CHIP	10PF	0.50PF	50V
C023	1-162-915-11	CERAMIC CHIP	10PF	0.50PF	50V
C024	1-162-915-11	CERAMIC CHIP	10PF	0.50PF	50V
C026	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C027	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C028	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C030	1-126-965-91	ELECT	22UF	20.00%	50V
C031	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C032	1-107-823-11	CERAMIC CHIP	0.47UF	10.00%	16V
C041	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C042	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C043	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C044	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C047	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C048	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C050	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C051	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
			(KV-AR34M81 ONLY)		
C053	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C056	1-163-263-11	CERAMIC CHIP	330PF	5.00%	50V
C057	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C058	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C059	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C061	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C101	1-126-964-11	ELECT	10UF	20.00%	50V
		(KV-AR34N90 ONLY)			
C103	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C104	1-126-935-11	ELECT	470UF	20.00%	16V
C106	1-163-035-00	CERAMIC CHIP	0.047UF		50V
		(KV-AR34N90 ONLY)			
C107	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V

REF NO.	PART NO.	DESCRIPTION			REMARK
C108	1-126-947-11	ELECT	47UF	20.00%	16V
C109	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C110	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C111	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C112	1-126-947-11	ELECT	47UF	20.00%	16V
C113	1-126-935-11	ELECT	470UF	20.00%	16V
C114	1-126-967-11	ELECT	47UF	20.00%	50V
C118	1-110-501-11	CERAMIC CHIP	0.33UF	10.00%	16V
C300	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C301	1-126-935-11	ELECT	470UF	20.00%	16V
C302	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C303	1-126-959-11	ELECT	0.47UF	20.00%	50V
C304	1-126-967-11	ELECT	47UF	20.00%	50V
C305	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C306	1-163-233-91	CERAMIC CHIP	18PF	5.00%	50V
C307	1-163-233-91	CERAMIC CHIP	18PF	5.00%	50V
C308	1-163-259-91	CERAMIC CHIP	220PF	5.00%	50V
C309	1-137-378-11	MYLAR	0.22UF	5.00%	50V
C311	1-126-964-11	ELECT	10UF	20.00%	50V
C312	1-164-346-11	CERAMIC CHIP	1UF		16V
C313	1-164-346-11	CERAMIC CHIP	1UF		16V
C314	1-164-346-11	CERAMIC CHIP	1UF		16V
C315	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C316	1-126-947-11	ELECT	47UF	20.00%	25V
C317	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C318	1-162-974-11	CERAMIC CHIP	0.01UF		50V
C319	1-162-974-11	CERAMIC CHIP	0.01UF		50V
C320	1-162-974-11	CERAMIC CHIP	0.01UF		50V
C322	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C324	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C325	1-126-960-11	ELECT	1UF	20.00%	50V
C327	1-126-965-91	ELECT	22UF	20.00%	50V
C328	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C329	1-126-963-11	ELECT	4.7UF	20.00%	50V
C330	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C331	1-126-963-11	ELECT	4.7UF	20.00%	50V
C332	1-126-963-11	ELECT	4.7UF	20.00%	50V
C335	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C336	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C337	1-126-961-11	ELECT	2.2UF	20.00%	50V
C341	1-115-340-11	CERAMIC CHIP	0.22UF	10.00%	25V
C342	1-163-259-91	CERAMIC CHIP	220PF	5.00%	50V
C347	1-126-933-11	ELECT	100UF	20.00%	16V
C348	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C349	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C350	1-163-031-91	CERAMIC CHIP	0.01UF		50V
		(KV-AR34M81 ONLY)			
C351	1-126-964-11	ELECT	10UF	20.00%	50V
C352	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C353	1-126-960-11	ELECT	1UF	20.00%	50V
C356	1-126-947-11	ELECT	47UF	20.00%	16V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A

REF NO.		PART NO.	DESCRIPTION		REMARK	
C357		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C358		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C359		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C502		1-163-145-00	CERAMIC CHIP	0.0015UF	5.00%	50V
C503		1-126-964-11	ELECT	10UF	20.00%	50V
C504		1-163-007-11	CERAMIC CHIP	680PF	10.00%	50V
C506		1-107-638-11	ELECT	33UF	20.00%	160V
C507		1-102-244-00	CERAMIC	220PF	10.00%	500V
C510		1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C512		1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C513		1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C514		1-106-383-00	MYLAR	0.047UF	10.00%	200V
C517		1-162-967-11	CERAMIC CHIP	0.0033UF	10.00%	50V
C518		1-126-933-11	ELECT	100UF	20.00%	16V
C519		1-102-212-00	CERAMIC	820PF	10.00%	500V
C521		1-104-666-11	ELECT	220UF	20.00%	25V
C522		1-126-933-11	ELECT	100UF	20.00%	16V
C523		1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C524		1-126-967-11	ELECT	47UF	20.00%	50V
C526		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C527		1-102-820-00	CERAMIC	330PF	5.00%	50V
C528		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C530		1-137-372-11	MYLAR	0.022UF	5.00%	50V
C531		1-107-903-11	ELECT	2.2UF	20.00%	50V
C532		1-128-528-11	ELECT	470UF	20.00%	25V
C533		1-128-528-11	ELECT	470UF	20.00%	25V
C534		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C536		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C537		1-107-911-11	ELECT	220UF	20.00%	50V
C538		1-136-544-11	FILM	0.023UF	3.00%	2KV
C539	⚠	1-130-118-91	FILM	0.051UF	5.00%	400V
C540		1-136-171-00	FILM	0.33UF	5.00%	50V
C543		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C546		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C548		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C549		1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C550		1-106-220-00	MYLAR	0.1UF	10.00%	100V
C551		1-126-960-11	ELECT	1UF	20.00%	50V
C552		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C553		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C554		1-106-361-00	MYLAR	0.0056UF	10.00%	100V
C556		1-128-528-11	ELECT	470UF	20.00%	25V
C557		1-126-941-11	ELECT	470UF	20.00%	25V
C558		1-123-024-21	ELECT	33UF		160V
C560		1-102-228-00	CERAMIC	470PF	10.00%	500V
C561		1-129-928-00	FILM	0.0027UF	5.00%	630V
C562		1-102-228-00	CERAMIC	470PF	10.00%	500V
C564		1-163-038-91	CERAMIC CHIP	0.1UF		25V
C565		1-107-655-11	ELECT	47UF	20.00%	250V
C566		1-102-244-00	CERAMIC	220PF	10.00%	500V
C567	⚠	1-117-813-71	FILM	0.75UF	5.00%	250V
C568		1-102-228-00	CERAMIC	470PF	10.00%	500V
C570		1-117-674-71	FILM	1.8UF	5.00%	250V
C572		1-115-514-11	FILM	0.22UF	5.00%	250V
C573		1-106-387-00	MYLAR	0.068UF	10.00%	200V
C574		1-104-709-11	ELECT	4.7UF		160V
C576		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C577		1-115-516-11	FILM	0.33UF	5.00%	250V
C586		1-216-295-91	SHORT CHIP	0		
C600	⚠	1-115-165-11	MYLAR	0.1UF	20.00%	250V

REF NO.		PART NO.	DESCRIPTION		REMARK	
C602	⚠	1-115-165-11	MYLAR	0.1UF	20.00%	250V
C603		1-126-967-11	ELECT	47UF	20.00%	50V
C604		1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C605	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C606	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C607		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C608		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C609		1-126-968-11	ELECT	100UF	20.00%	50V
C610		1-126-964-11	ELECT	10UF	20.00%	50V
C611		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C612		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C613		1-125-906-11	ELECT (KV-AR34M81)	560UF	20.00%	450V
C613		1-113-611-11	ELECT(BLOCK) (KV-AR34N90)	820UF	20.00%	250V
C614		1-126-964-11	ELECT	10UF	20.00%	50V
C615	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C616		1-130-202-00	FILM (KV-AR34M81 ONLY)	0.022UF	5.00%	400V
C617		1-107-792-11	CERAMIC (KV-AR34M81 ONLY)	100PF	5.00%	1KV
C618		1-125-893-21	FILM	680PF	3%	1.5KV
C619	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C620		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C621		1-102-114-00	CERAMIC	470PF	10.00%	50V
C622		1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C623		1-104-665-11	ELECT	100UF	20.00%	25V
C624		1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C626		1-102-002-00	CERAMIC	680PF	10.00%	500V
C629		1-107-906-11	ELECT	10UF	20.00%	50V
C630		1-125-494-11	ELECT(BLOCK)	560UF	20.00%	160V
C631		1-128-550-11	ELECT	2200UF	20.00%	50V
C632		1-126-936-11	ELECT	3300UF	20.00%	16V
C633		1-104-999-11	MYLAR	0.1UF	10.00%	200V
C634		1-126-934-11	ELECT	220UF	20.00%	16V
C635		1-126-934-11	ELECT	220UF	20.00%	16V
C636		1-104-760-11	CERAMIC CHIP	0.047UF	10.00%	50V
C638		1-161-830-00	CERAMIC	0.0047UF		500V
C641		1-102-002-00	CERAMIC	680PF	10.00%	500V
C642		1-126-943-11	ELECT	2200UF	20.00%	25V
C643		1-126-933-11	ELECT	100UF	20.00%	16V
C644		1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C645		1-137-605-11	MYLAR	0.01UF	10.00%	250V
C646		1-107-679-91	ELECT	10UF	20.00%	450V
C647		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C649		1-126-940-11	ELECT	330UF	20.00%	25V
C650		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C651		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C652		1-126-965-91	ELECT	22UF	20.00%	50V
C653		1-126-967-11	ELECT	47UF	20.00%	50V
C655	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C657		1-101-821-00	CERAMIC	0.0022UF		500V
C659		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C912		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C913		1-104-665-11	ELECT	100UF	20.00%	10V

<CONNECTOR>

CN101	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN102	*	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P

A

REF NO.		PART NO.	DESCRIPTION	REMARK
CN104		1-695-915-11	TAB (CONTACT)	
CN105		1-695-915-11	TAB (CONTACT)	
CN106	*	1-564-506-11	PLUG, CONNECTOR 3P	
CN201	*	1-564-508-11	PLUG, CONNECTOR 5P	
CN202	*	1-785-608-11	PIN, CONNECTOR 4P	
CN301	*	1-774-813-11	CONNECTOR, BOARD TO BOARD 7P (KV-AR34M81 ONLY)	
CN303	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN305	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN307	*	1-774-813-11	CONNECTOR, BOARD TO BOARD 7P (KV-AR34M81 ONLY)	
CN503	*	1-564-510-11	PLUG, CONNECTOR 7P	
CN504		1-695-915-11	TAB (CONTACT)	
CN505	*	1-564-508-11	PLUG, CONNECTOR 5P	
CN507	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN508		1-695-915-11	TAB (CONTACT)	
CN510	*	1-564-507-11	PLUG, CONNECTOR 4P (KV-AR34N90 ONLY)	
CN601		1-580-843-11	PIN, CONNECTOR (POWER)	
CN602	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN603	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN604	*	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN608	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN904	*	1-564-512-11	PLUG, CONNECTOR 9P	
			<DIODE>	
D001		8-719-081-97	MMDL914T1	
D002		8-719-081-97	MMDL914T1	
D004		1-216-295-91	SHORT CHIP 0	
D005		8-719-081-97	MMDL914T1	
D006		1-216-295-91	SHORT CHIP 0	
D007		8-719-081-97	MMDL914T1	
D008		8-719-081-97	MMDL914T1	
D009		8-719-081-97	MMDL914T1	
D010		8-719-158-35	RD9.1S-B	
D300		1-216-295-91	SHORT CHIP 0	
D301		8-719-081-97	MMDL914T1	
D306		8-719-081-97	MMDL914T1	
D307		8-719-081-97	MMDL914T1	
D308		8-719-081-97	MMDL914T1	
D309		8-719-159-10	RD5.1SB-T2	
D311		8-719-081-97	MMDL914T1	
D312		8-719-081-97	MMDL914T1	
D313		8-719-081-97	MMDL914T1	
D315		8-719-081-97	MMDL914T1	
D316		8-719-158-35	RD9.1S-B	
D319		8-719-158-35	RD9.1S-B	
D320		8-719-158-35	RD9.1S-B	
D321		8-719-158-35	RD9.1S-B	
D322		8-719-158-35	RD9.1S-B	
D504		8-719-302-43	EL1Z	
D505		8-719-081-97	MMDL914T1	
D506		8-719-911-19	1SS119-25	
D507		8-719-081-97	MMDL914T1	
D508		8-719-081-97	MMDL914T1	
D509		8-719-036-94	RD5.6SB-T1	
D510		8-719-081-97	MMDL914T1	
D511		8-719-081-97	MMDL914T1	
D512		8-719-081-97	MMDL914T1	
D513		8-719-908-03	GP08D	
D517		8-719-945-80	ERC06-15S	
D518		8-719-074-35	RU4AM-T4	
D519		8-719-945-80	ERC06-15S	
D520		8-719-081-97	MMDL914T1	
D521		8-719-028-45	D2L20U	
D522		8-719-028-45	D2L20U	
D523		8-719-028-45	D2L20U	
D527		8-719-908-03	GP08D	
D528		8-719-908-03	GP08D	
D531		8-719-081-97	MMDL914T1	
D532		8-719-081-97	MMDL914T1	
D534		1-216-295-91	SHORT CHIP 0	
D600		8-719-911-19	1SS119-25	
D602		8-719-911-19	1SS119-25	
D603		8-719-150-92	RD33EB3T	
D604		8-719-028-72	RGP02-17EL-6433	
D605		8-719-510-22	D3SB60	
D606		8-719-108-18	5P-6M	
D607		8-719-081-97	MMDL914T1	
D608		8-719-110-53	RD20ES-B2	
D609		8-719-311-31	RU-1P (KV-AR34M81 ONLY)	
D610		8-719-043-76	AK04V0	
D611		8-719-046-74	AU-01Z-V1	
D612		8-719-043-52	F5KQ60	
D613		8-719-046-74	AU-01Z-V1	
D614		8-719-046-74	AU-01Z-V1	
D620		8-719-110-72	RD30ESB2	
D621		8-719-071-38	D5S6M	
D622		8-719-077-49	D3L60	
D623		8-719-082-03	DIODE MM3Z15VT1	
D624		8-719-081-97	MMDL914T1	
D625		8-719-158-39	RD10S-B	
D628		8-719-911-19	1SS119-25	
D630		8-719-052-74	FMX-12S	
D631		8-719-068-00	ERC04-06SE	
D632		8-719-068-00	ERC04-06SE	
D633		8-719-948-45	ERA22-08	
D634		8-719-081-97	MMDL914T1	
D635		8-719-081-97	MMDL914T1	
D636		8-719-510-02	D1NS4	
D637		8-719-109-96	RD6.8ES-B1	
D638		8-719-510-48	D1N20R	
			<CONNECTOR>	
DY1	*	1-580-798-11	CONNECTOR PIN (DY) 6P	
			<FERRITE BEAD>	
FB300		1-412-911-31	FERRITE 0UH	
FB501		1-410-397-21	FERRITE 1.1UH	
FB502		1-410-397-21	FERRITE 1.1UH	
FB600		1-410-397-21	FERRITE 1.1UH	
FB601		1-410-397-21	FERRITE 1.1UH	
FB602		1-410-397-21	FERRITE 1.1UH	
FB603		1-410-397-21	FERRITE 1.1UH	
FB604		1-412-911-31	FERRITE 0UH	
FB605		1-412-911-31	FERRITE 0UH	
FB606		1-412-911-31	FERRITE 0UH	
FB608		1-412-911-31	FERRITE 0UH	
FB611		1-410-397-21	FERRITE 1.1UH	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF NO.	PART NO.	DESCRIPTION	REMARK
FB612	1-410-397-21	FERRITE	1.1UH
FB613	1-410-397-21	FERRITE	1.1UH (KV-AR34M81 ONLY)
FB615	1-410-397-21	FERRITE	1.1UH
		<IC>	
IC001	8-752-933-33	IC CXP750097-605S (KV-AR34M81)	
IC001	8-752-932-96	IC CXP750097-604S (KV-AR34N90)	
IC002	8-759-371-21	MM1319AFBE	
IC003	8-759-527-72	M24C16-BN6	
IC301	8-752-095-72	CXA2159S	
IC302	8-759-666-90	IC TDA9181T (KV-AR34M81)	
IC302	8-759-672-27	TDA9183T (KV-AR34N90)	
IC502	8-759-700-07	NJM2903M	
IC503	8-759-980-58	TDA8172	
IC601	8-749-019-09	IC STR-F6456S	
IC602	8-749-920-61	SE-135N	
IC603	8-759-701-59	NJM78M09FA	
IC604	8-759-231-53	TA7805S	
		<CHIP CONDUCTOR>	
JR001	1-216-295-91	SHORT CHIP	0
JR002	1-216-295-91	SHORT CHIP	0
JR003	1-216-295-91	SHORT CHIP	0
JR004	1-216-295-91	SHORT CHIP	0
JR006	1-216-295-91	SHORT CHIP	0
JR007	1-216-295-91	SHORT CHIP	0
JR008	1-216-295-91	SHORT CHIP	0
JR010	1-216-295-91	SHORT CHIP	0
JR012	1-216-295-91	SHORT CHIP	0
JR014	1-216-295-91	SHORT CHIP	0
JR015	1-216-295-91	SHORT CHIP	0
JR016	1-216-295-91	SHORT CHIP	0
JR020	1-216-295-91	SHORT CHIP	0
JR022	1-216-295-91	SHORT CHIP	0
JR023	1-216-295-91	SHORT CHIP	0
JR024	1-216-295-91	SHORT CHIP	0
JR025	1-216-295-91	SHORT CHIP	0
JR028	1-216-295-91	SHORT CHIP	0
JR030	1-216-295-91	SHORT CHIP	0
JR031	1-216-295-91	SHORT CHIP	0
JR107	1-216-295-91	SHORT CHIP	0 (KV-AR34N90 ONLY)
JR108	1-216-295-91	SHORT CHIP	0 (KV-AR34N90 ONLY)
JR109	1-216-295-91	SHORT CHIP	0 (KV-AR34M81 ONLY)
JR111	1-216-295-91	SHORT CHIP	0 (KV-AR34N90 ONLY)
JR214	1-216-295-91	SHORT CHIP	0
JR304	1-216-295-91	SHORT CHIP	0
JR308	1-216-295-91	SHORT CHIP	0
JR309	1-216-295-91	SHORT CHIP	0
JR310	1-216-295-91	SHORT CHIP	0
JR311	1-216-295-91	SHORT CHIP	0
JR400	1-216-295-91	SHORT CHIP	0
JR500	1-216-295-91	SHORT CHIP	0
JR501	1-216-295-91	SHORT CHIP	0
JR502	1-216-295-91	SHORT CHIP	0
JR503	1-216-295-91	SHORT CHIP	0
JR600	1-216-295-91	SHORT CHIP	0

REF NO.	PART NO.	DESCRIPTION		REMARK	
		<COIL>			
L002	1-414-856-11	INDUCTOR	10UH		
L003	1-414-180-11	INDUCTOR	3.3UH		
L004	1-249-395-11	CARBON	15	5%	1/4W
L005	1-414-233-22	FERRITE	0UH		
L101	1-414-856-11	INDUCTOR	10UH		
L102	1-414-189-31	INDUCTOR	100UH		
L103	1-414-856-11	INDUCTOR	10UH		
L104	1-414-856-11	INDUCTOR	10UH		
L105	1-414-185-41	INDUCTOR	22UH		
L301	1-414-189-31	INDUCTOR	100UH		
L302	1-414-185-41	INDUCTOR	22UH		
L303	1-414-189-31	INDUCTOR	100UH		
L304	1-414-189-31	INDUCTOR	100UH		
L501	1-412-525-31	INDUCTOR	10UH		
L502	1-422-613-11	COIL, AIR CORE			
L503	1-412-525-31	INDUCTOR	10UH		
L504	1-412-525-31	INDUCTOR	10UH		
L507	1-459-111-00	INDUCTOR	10MH		
L511	1-406-977-71	INDUCTOR	0UH		
L512	1-412-549-31	INDUCTOR	1MH		
L513	1-412-549-31	INDUCTOR	1MH		
L515	1-459-104-00	COIL, WITH CORE			
L518	1-414-187-11	INDUCTOR	47UH		
L601	1-412-527-11	INDUCTOR	15UH		
L905	1-414-856-11	INDUCTOR	10UH		
		<PHOTO COUPLER>			
PH600	⚠ 8-749-924-35	ON3171-R			
		<IC LINK>			
PS600	1-533-597-41	IC LINK		5A	90V
PS601	1-533-597-41	IC LINK		5A	90V
		<TRANSISTOR>			
Q001	8-729-216-22	2SA1162-G			
Q002	8-729-010-25	MSD601-RT1			
Q101	8-729-010-25	MSD601-RT1			
Q301	8-729-216-22	2SA1162-G			
Q302	8-729-230-49	2SC2712-YG			
Q303	8-729-216-22	2SA1162-G			
Q304	8-729-216-22	2SA1162-G			
Q305	8-729-216-22	2SA1162-G			
Q306	8-729-230-49	2SC2712-YG			
Q307	8-729-230-49	2SC2712-YG			
Q308	8-729-216-22	2SA1162-G			
Q309	8-729-421-19	UN2213 (KV-AR34M81 ONLY)			
Q310	8-729-230-49	2SC2712-YG			
Q311	8-729-010-25	MSD601-RT1			
Q312	8-729-216-22	2SA1162-G			
Q313	8-729-010-25	MSD601-RT1			
Q314	8-729-216-22	2SA1162-G			
Q315	8-729-421-19	UN2213			
Q316	8-729-216-22	2SA1162-G			
Q317	8-729-216-22	2SA1162-G			

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REF NO.	PART NO.	DESCRIPTION			REMARK
Q501	8-729-216-22	2SA1162-G			
Q502	8-729-216-22	2SA1162-G			
Q503	8-729-010-25	MSD601-RT1			
Q505	8-729-931-45	IRF614			
Q506	8-729-119-80	2SC2688-LK			
Q507	8-729-216-22	2SA1162-G			
Q509	8-729-010-25	MSD601-RT1			
Q511	8-729-016-32	2SC4927-01			
Q600	8-729-119-78	2SC2785-HFE			
Q601	8-729-023-22	2SD2114K			
Q602	8-729-010-25	MSD601-RT1			
Q603	8-729-027-23	DTA114EKA-T146			
Q604	8-729-200-17	2SA1091-O			
Q605	8-729-044-30	2SK2845-LB102			
Q606	8-729-010-25	MSD601-RT1			
Q607	8-729-823-22	2SC3576			
Q608	8-729-010-25	MSD601-RT1			
		<RESISTOR>			
R001	1-414-233-22	FERRITE	0UH		
R002	1-216-025-11	RES-CHIP	100	5%	1/10W
R003	1-216-073-91	RES-CHIP	10K	5%	1/10W
R004	1-216-025-11	RES-CHIP	100	5%	1/10W
R005	1-216-025-11	RES-CHIP	100	5%	1/10W
R006	1-216-689-11	RES-CHIP	39K	5%	1/10W
		(KV-AR34N90 ONLY)			
R007	1-216-033-00	RES-CHIP	220	5%	1/10W
		(KV-AR34N90 ONLY)			
R008	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R009	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
		(KV-AR34N90 ONLY)			
R010	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R011	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R012	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R013	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R014	1-216-025-11	RES-CHIP	100	5%	1/10W
R015	1-216-025-11	RES-CHIP	100	5%	1/10W
R018	1-216-033-00	RES-CHIP	220	5%	1/10W
R019	1-216-073-91	RES-CHIP	10K	5%	1/10W
R020	1-216-045-00	RES-CHIP	680	5%	1/10W
R021	1-216-073-91	RES-CHIP	10K	5%	1/10W
R022	1-216-295-91	SHORT CHIP	0		
R023	1-216-049-11	RES-CHIP	1K	5%	1/10W
R024	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R025	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R026	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R027	1-216-049-11	RES-CHIP	1K	5%	1/10W
R028	1-216-049-11	RES-CHIP	1K	5%	1/10W
		(KV-AR34N90 ONLY)			
R029	1-216-049-11	RES-CHIP	1K	5%	1/10W
R030	1-216-025-11	RES-CHIP	100	5%	1/10W
		(KV-AR34N90 ONLY)			
R031	1-216-049-11	RES-CHIP	1K	5%	1/10W
R032	1-216-025-11	RES-CHIP	100	5%	1/10W
R034	1-216-049-11	RES-CHIP	1K	5%	1/10W
R035	1-216-025-11	RES-CHIP	100	5%	1/10W
R036	1-216-025-11	RES-CHIP	100	5%	1/10W
		(KV-AR34M81 ONLY)			
R037	1-216-025-11	RES-CHIP	100	5%	1/10W
		(KV-AR34M81)			
R037	1-216-077-91	RES-CHIP	15K	5%	1/10W
		(KV-AR34N90)			

REF NO.	PART NO.	DESCRIPTION			REMARK
R038	1-216-049-11	RES-CHIP	1K	5%	1/10W
		(KV-AR34M81 ONLY)			
R040	1-216-025-11	RES-CHIP	100	5%	1/10W
R041	1-216-025-11	RES-CHIP	100	5%	1/10W
R042	1-216-295-91	SHORT CHIP	0		
R043	1-216-049-11	RES-CHIP	1K	5%	1/10W
R044	1-216-025-11	RES-CHIP	100	5%	1/10W
R045	1-414-233-22	FERRITE	0UH		
R046	1-216-049-11	RES-CHIP	1K	5%	1/10W
R047	1-414-233-22	FERRITE	0UH		
R048	1-216-073-91	RES-CHIP	10K	5%	1/10W
R050	1-216-073-91	RES-CHIP	10K	5%	1/10W
R053	1-216-049-11	RES-CHIP	1K	5%	1/10W
R058	1-216-295-91	SHORT CHIP	0		
R059	1-216-295-91	SHORT CHIP	0		
R060	1-216-295-91	SHORT CHIP	0		
R061	1-216-295-91	SHORT CHIP	0		
R062	1-216-041-00	RES-CHIP	470	5%	1/10W
R063	1-216-041-00	RES-CHIP	470	5%	1/10W
R064	1-216-041-00	RES-CHIP	470	5%	1/10W
R065	1-216-041-00	RES-CHIP	470	5%	1/10W
R066	1-216-049-11	RES-CHIP	1K	5%	1/10W
R067	1-216-049-11	RES-CHIP	1K	5%	1/10W
R068	1-216-041-00	RES-CHIP	470	5%	1/10W
R103	1-216-025-11	RES-CHIP	100	5%	1/10W
		(KV-AR34N90 ONLY)			
R104	1-216-025-11	RES-CHIP	100	5%	1/10W
		(KV-AR34N90 ONLY)			
R105	1-216-295-91	SHORT CHIP	0		
R106	1-216-049-11	RES-CHIP	1K	5%	1/10W
		(KV-AR34N90 ONLY)			
R109	1-216-041-00	RES-CHIP	470	5%	1/10W
R111	1-216-025-11	RES-CHIP	100	5%	1/10W
R112	1-216-025-11	RES-CHIP	100	5%	1/10W
R113	1-216-025-11	RES-CHIP	100	5%	1/10W
R114	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
		(KV-AR34N90 ONLY)			
R115	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
		(KV-AR34N90 ONLY)			
R225	1-216-033-00	RES-CHIP	220	5%	1/10W
R226	1-216-033-00	RES-CHIP	220	5%	1/10W
R227	1-216-033-00	RES-CHIP	220	5%	1/10W
R237	1-216-295-91	SHORT CHIP	0		
R301	1-216-113-00	RES-CHIP	470K	5%	1/10W
R302	1-216-295-91	SHORT CHIP	0		
R303	1-216-049-11	RES-CHIP	1K	5%	1/10W
R304	1-216-073-91	RES-CHIP	10K	5%	1/10W
R308	1-216-025-11	RES-CHIP	100	5%	1/10W
R309	1-216-025-11	RES-CHIP	100	5%	1/10W
R310	1-216-025-11	RES-CHIP	100	5%	1/10W
R311	1-216-041-00	RES-CHIP	470	5%	1/10W
R312	1-216-039-00	RES-CHIP	390	5%	1/10W
R313	1-216-037-00	RES-CHIP	330	5%	1/10W
R314	1-216-083-00	RES-CHIP	27K	5%	1/10W
R315	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R316	1-216-037-00	RES-CHIP	330	5%	1/10W
R317	1-216-091-00	RES-CHIP	56K	5%	1/10W
R318	1-216-039-00	RES-CHIP	390	5%	1/10W
R319	1-216-025-11	RES-CHIP	100	5%	1/10W
R320	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R321	1-216-073-91	RES-CHIP	10K	5%	1/10W
R322	1-216-033-00	RES-CHIP	220	5%	1/10W
R323	1-216-053-00	RES-CHIP	1.5K	5%	1/10W

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REF NO.	PART NO.	DESCRIPTION		REMARK	
R324	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R326	1-216-029-00	RES-CHIP	150	5%	1/10W
R327	1-216-033-00	RES-CHIP	220	5%	1/10W
R328	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R329	1-216-041-00	RES-CHIP	470	5%	1/10W
R331	1-216-295-91	SHORT CHIP	0		
R332	1-216-033-00	RES-CHIP	220	5%	1/10W
R335	1-216-045-00	RES-CHIP	680	5%	1/10W
R338	1-216-029-00	RES-CHIP	150	5%	1/10W
R339	1-216-033-00	RES-CHIP	220	5%	1/10W
R340	1-216-025-11	RES-CHIP	100	5%	1/10W
R345	1-216-073-91	RES-CHIP	10K	5%	1/10W
R348	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R349	1-216-073-91	RES-CHIP	10K	5%	1/10W
R350	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R351	1-216-049-11	RES-CHIP	1K	5%	1/10W
R354	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R355	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R356	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R357	1-216-079-00	RES-CHIP	18K	5%	1/10W
R358	1-216-049-11	RES-CHIP	1K	5%	1/10W
R359	1-216-033-00	RES-CHIP	220	5%	1/10W
R360	1-216-033-00	RES-CHIP	220	5%	1/10W
R361	1-216-073-91	RES-CHIP	10K	5%	1/10W
R362	1-216-075-00	RES-CHIP	12K	5%	1/10W
R363	1-216-079-00	RES-CHIP	18K	5%	1/10W
R364	1-216-295-91	SHORT CHIP	0		
R365	1-216-033-00	RES-CHIP	220	5%	1/10W
R366	1-216-073-91	RES-CHIP	10K	5%	1/10W
R367	1-216-073-91	RES-CHIP	10K	5%	1/10W
R368	1-216-073-91	RES-CHIP	10K	5%	1/10W
R370	1-216-033-00	RES-CHIP	220	5%	1/10W
R371	1-216-083-00	RES-CHIP	27K	5%	1/10W
R372	1-216-091-00	RES-CHIP	56K	5%	1/10W
R375	1-216-025-11	RES-CHIP (KV-AR34M81 ONLY)	100	5%	1/10W
R376	1-216-081-00	RES-CHIP	22K	5%	1/10W
R377	1-216-121-11	RES-CHIP	1M	5%	1/10W
R378	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R379	1-218-179-11	RES-CHIP	10M	5%	1/10W
R381	1-216-295-91	SHORT CHIP	0		
R382	1-216-065-91	RES-CHIP (KV-AR34M81 ONLY)	4.7K	5%	1/10W
R383	1-216-049-11	RES-CHIP	1K	5%	1/10W
R384	1-216-041-00	RES-CHIP	470	5%	1/10W
R385	1-216-029-00	RES-CHIP	150	5%	1/10W
R391	1-216-295-91	SHORT CHIP	0		
R500	1-249-417-11	CARBON	1K	5%	1/4W
R501	1-216-049-11	RES-CHIP	1K	5%	1/10W
R505	1-216-113-00	RES-CHIP	470K	5%	1/10W
R506	1-216-079-00	RES-CHIP	18K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W
R508	1-243-527-71	METAL OXIDE	47	5%	3W
R509	1-216-474-11	METAL OXIDE	82	5%	3W
R510	1-216-424-71	METAL OXIDE	39	5%	1W
R511	1-243-517-71	METAL OXIDE	6.8	5%	3W
R515	1-243-809-71	METAL OXIDE	1	5%	1W
R517	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-216-469-71	METAL OXIDE	12	5%	3W
R520	1-249-429-11	CARBON	10K	5%	1/4W
R522	1-216-073-91	RES-CHIP	10K	5%	1/10W

REF NO.	PART NO.	DESCRIPTION		REMARK	
R523	1-249-411-11	CARBON	330	5%	1/4W
R525	1-208-854-11	METAL CHIP	1M	0.5%	1/10W
R526	1-208-803-11	METAL CHIP	7.5K	0.5%	1/10W
R527	1-216-001-00	RES-CHIP	10	5%	1/10W
R528	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R529	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R531	1-247-843-11	CARBON	3.3K	5%	1/4W
R532	1-216-073-91	RES-CHIP	10K	5%	1/10W
R533	1-249-417-11	CARBON	1K	5%	1/4W
R534	1-216-364-71	METAL OXIDE	0.39	5%	2W
R535	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R536	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R537	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R539	1-216-049-11	RES-CHIP	1K	5%	1/10W
R540	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R541	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R542	1-216-097-11	RES-CHIP	100K	5%	1/10W
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W
R544	1-215-480-71	METAL OXIDE	820	5%	3W
R545	1-216-077-91	RES-CHIP	15K	5%	1/10W
R546	1-216-077-91	RES-CHIP	15K	5%	1/10W
R547	1-216-085-91	RES-CHIP	33K	5%	1/10W
R548	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R549	1-215-451-00	METAL	18K	1%	1/4W
R550	1-216-097-11	RES-CHIP	100K	5%	1/10W
R551	1-249-421-11	CARBON	2.2K	5%	1/4W
R552	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R553	1-215-453-00	METAL	22K	1%	1/4W
R554	1-215-453-00	METAL	22K	1%	1/4W
R556	1-215-437-00	METAL	4.7K	1%	1/4W
R557	1-216-361-00	METAL OXIDE	0.22	5%	2W
R558	1-247-843-11	CARBON	3.3K	5%	1/4W
R559	1-249-429-11	CARBON	10K	5%	1/4W
R560	1-216-073-91	RES-CHIP	10K	5%	1/10W
R561	1-216-049-11	RES-CHIP	1K	5%	1/10W
R562	1-249-401-11	CARBON	47	5%	1/4W
R564	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R565	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R568	1-249-383-11	CARBON	1.5	5%	1/4W
R570	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R571	1-215-442-00	METAL	7.5K	1%	1/4W
R575	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R577	1-243-535-71	METAL OXIDE	220	5%	3W
R578	1-216-369-00	METAL OXIDE	1	5%	2W
R579	1-216-295-91	SHORT CHIP	0		
R580	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R581	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R582	1-216-295-91	SHORT CHIP	0		
R583	1-216-125-00	RES-CHIP	1.5M	5%	1/10W
R584	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R585	1-249-381-11	CARBON	1	5%	1/4W
R587	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R588	1-243-531-71	METAL OXIDE	100	5%	3W
R589	1-215-886-71	METAL OXIDE	100	5%	2W
R590	1-215-465-00	METAL	68K	1%	1/4W
R591	1-260-288-11	CARBON	0.47	5%	1/2W
R592	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R593	1-260-288-11	CARBON	0.47	5%	1/2W
R594	1-260-288-11	CARBON	0.47	5%	1/2W
R596	1-215-480-71	METAL OXIDE	820	5%	3W
R597	1-247-750-11	CARBON	680	5%	1/2W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A B1

REF NO.		PART NO.	DESCRIPTION		REMARK	
R598		1-249-438-11	CARBON	56K	5%	1/4W
R599		1-249-389-11	CARBON	4.7	5%	1/4W
R600		1-249-438-11	CARBON	56K	5%	1/4W
R601		1-249-417-11	CARBON	1K	5%	1/4W
R602		1-249-389-11	CARBON	4.7	5%	1/4W
R603		1-215-485-00	METAL	470K	1%	1/4W
R604		1-216-097-11	RES-CHIP	100K	5%	1/10W
R607		1-249-425-11	CARBON	4.7K	5%	1/4W
R608		1-240-205-91	METAL	22M	5%	1/2W
R609		1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R610		1-216-073-91	RES-CHIP	10K	5%	1/10W
R611		1-216-089-91	RES-CHIP	47K	5%	1/10W
R612		1-216-045-00	RES-CHIP	680	5%	1/10W
R614		1-216-041-00	RES-CHIP	470	5%	1/10W
R615		1-216-366-00	METAL OXIDE	0.56	5%	2W
R616		1-260-302-51	CARBON	6.8	5%	1/2W
R617		1-247-791-91	CARBON	22	5%	1/4W
R619		1-260-128-91	CARBON	270K	5%	1/2W
R620	⚠	1-129-720-61	FILM (KV-AR34M81)	0.033UF	5.00%	630V
R620	⚠	1-130-202-91	FILM (KV-AR34N90)	0.022UF	5.00%	400V
R621		1-215-864-00	METAL OXIDE	150	5%	1W
R623		1-216-095-00	RES-CHIP	82K	5%	1/10W
R624		1-216-089-91	RES-CHIP	47K	5%	1/10W
R626		1-216-049-11	RES-CHIP	1K	5%	1/10W
R627		1-240-251-11	CEMENTED	6.8	5%	10W
R629		1-247-747-11	CARBON	470	5%	1/2W
R630		1-249-429-11	CARBON	10K	5%	1/4W
R631		1-216-089-91	RES-CHIP	47K	5%	1/10W
R632		1-220-886-11	FUSIBLE	0.1	10%	1W
R634	⚠	1-240-917-91	METAL	8.2M	5%	1W
R635		1-216-492-11	METAL OXIDE (KV-AR34M81 ONLY)	82K	5%	3W
R636		1-215-924-00	METAL OXIDE	15K	5%	3W
R637		1-216-492-11	METAL OXIDE (KV-AR34M81 ONLY)	82K	5%	3W
R639		1-216-361-00	METAL OXIDE	0.22	5%	2W
R640		1-249-415-11	CARBON	680	5%	1/4W
R641		1-216-361-00	METAL OXIDE	0.22	5%	2W
R642		1-249-419-11	CARBON	1.5K	5%	1/4W
R643		1-247-843-11	CARBON	3.3K	5%	1/4W
R644		1-249-419-11	CARBON	1.5K	5%	1/4W
R646		1-215-924-00	METAL OXIDE	15K	5%	3W
R647		1-249-387-11	CARBON	3.3	5%	1/4W
R648		1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R649		1-249-417-11	CARBON	1K	5%	1/4W
R650		1-215-882-00	METAL OXIDE	22	5%	2W
R652		1-215-925-11	METAL OXIDE	22K	5%	3W
R653		1-215-873-00	METAL OXIDE	4.7K	5%	1W
R654		1-216-369-00	METAL OXIDE	1	5%	2W
R656		1-249-417-11	CARBON	1K	5%	1/4W
R657		1-260-127-11	CARBON	220K	5%	1/2W
R659		1-216-049-11	RES-CHIP	1K	5%	1/10W
R660		1-216-073-91	RES-CHIP	10K	5%	1/10W
R661		1-215-873-00	METAL OXIDE	4.7K	5%	1W
R682		1-219-134-11	FUSIBLE	0.1	10%	1/4W
R909		1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R910		1-216-065-91	RES-CHIP	4.7K	5%	1/10W

REF NO.		PART NO.	DESCRIPTION	REMARK
			<RELAY>	
RY600	⚠	1-755-299-11	RELAY, AC POWER	
RY601	⚠	1-755-299-11	RELAY, AC POWER	
			<SWITCH>	
S501		1-572-707-11	SWITCH, LEVER	
S502		1-572-707-11	SWITCH, LEVER	
			<TRANSFORMER>	
T501		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
T503	⚠	1-453-357-31	TRANSFORMER ASSY FLY BACK (NX-4009//M3B4) (KV-AR34M81)	
T503	⚠	1-453-298-11	TRANSFORMER ASSY, FLY BACK (NX-4009//M3P) (KV-AR34N90)	
T504		1-431-475-11	TRANSFORMER, HORIZONTAL LINEAR	
T505		1-426-981-71	TRANSFORMER, FERRITE (PMT)	
T601	⚠	1-437-825-11	TRANSFORMER, LINE FILTER (KV-AR34M81)	
T601	⚠	1-429-707-12	TRANSFORMER, LINE FILTER (KV-AR34N90)	
T603	⚠	1-431-976-41	TRANSFORMER, CONVERTER (SRT)	
T604		1-431-852-11	TRANSFORMER, CONVERTER (SRT)	
			<THERMISTOR>	
TH600		1-803-586-11	THERMISTOR, NTC	
			<THERMISTOR>	
THP600	⚠	1-803-541-11	THERMISTOR (KV-AR34M81)	
THP600	⚠	1-803-970-11	THERMISTOR POSITIVE (KV-AR34N90)	
			<TUNER>	
TU101		8-598-449-10	TUNER, FSS BTF-LG433 (KV-AR34M81)	
TU101		8-598-593-20	TUNER, FSS BTF-WA421 (KV-AR34N90)	
			<VARISTOR>	
VDR600		1-803-830-11	VARISTOR (ERZV14D621) (KV-AR34M81)	
VDR600		1-801-451-51	VARISTOR TNR14V271K660 (KV-AR34N90)	
			<CRYSTAL>	
X001		1-781-174-21	VIBRATOR, CERAMIC	
X301		1-781-134-21	VINRATOR, CRYSTAL	
X302		1-781-132-21	VIBRATOR, CTYSTAL	

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* A-1131-652-A B1 BOARD MOUNTED
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<CAPACITOR>

C1513	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1514	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1515	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C1517	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1518	1-126-967-11	ELECT	47UF	20.00%	50V

B1 B10

REF NO.	PART NO.	DESCRIPTION			REMARK
C1519	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C1520	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C1522	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1523	1-163-255-11	CERAMIC CHIP	150PF	5.00%	50V
C1524	1-163-247-91	CERAMIC CHIP	68PF	5.00%	50V
C1525	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C1526	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C1528	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1529	1-163-255-11	CERAMIC CHIP	150PF	5.00%	50V
C1530	1-163-247-91	CERAMIC CHIP	68PF	5.00%	50V
C1543	1-126-933-11	ELECT	100UF	20.00%	16V
C1544	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1554	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1555	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1556	1-163-038-91	CERAMIC CHIP	0.1UF		25V
		<CONNECTOR>			
CN1501 *	1-564-511-11	PLUG, CONNECTOR 8P			
CN1502 *	1-564-508-11	PLUG, CONNECTOR 5P			
CN1503	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P			
		<DIODE>			
D1501	8-719-158-35	RD9.1S-B			
		<IC>			
IC1502	8-759-439-64	HEF4053BT			
		<COIL>			
L1501	1-414-856-11	INDUCTOR	10UH		
L1506	1-414-857-11	INDUCTOR	100UH		
L1507	1-414-187-11	INDUCTOR	47UH		
L1508	1-414-187-11	INDUCTOR	47UH		
L1509	1-414-857-11	INDUCTOR	100UH		
L1510	1-414-187-11	INDUCTOR	47UH		
L1511	1-414-187-11	INDUCTOR	47UH		
		<TRANSISTOR>			
Q1501	8-729-010-25	MSD601-RT1			
Q1502	8-729-216-22	2SA1162-G			
Q1503	8-729-010-25	MSD601-RT1			
Q1504	8-729-010-25	MSD601-RT1			
Q1505	8-729-010-25	MSD601-RT1			
Q1506	8-729-010-25	MSD601-RT1			
Q1507	8-729-216-22	2SA1162-G			
Q1509	8-729-010-25	MSD601-RT1			
Q1510	8-729-010-25	MSD601-RT1			
Q1511	8-729-216-22	2SA1162-G			
Q1514	8-729-010-25	MSD601-RT1			
Q1515	8-729-010-25	MSD601-RT1			
Q1516	8-729-216-22	2SA1162-G			
Q1520	8-729-010-25	MSD601-RT1			
Q1522	8-729-010-25	MSD601-RT1			
Q1523	8-729-216-22	2SA1162-G			

REF NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R1501	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1502	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1503	1-216-025-11	RES-CHIP	100	5%	1/10W
R1504	1-216-025-11	RES-CHIP	100	5%	1/10W
R1506	1-216-025-11	RES-CHIP	100	5%	1/10W
R1507	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1508	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1511	1-216-033-00	RES-CHIP	220	5%	1/10W
R1512	1-216-005-00	RES-CHIP	15	5%	1/10W
R1515	1-216-041-00	RES-CHIP	470	5%	1/10W
R1516	1-216-025-11	RES-CHIP	100	5%	1/10W
R1517	1-216-075-00	RES-CHIP	12K	5%	1/10W
R1520	1-216-079-00	RES-CHIP	18K	5%	1/10W
R1522	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1523	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1528	1-216-033-00	RES-CHIP	220	5%	1/10W
R1529	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1531	1-216-045-00	RES-CHIP	680	5%	1/10W
R1537	1-216-041-00	RES-CHIP	470	5%	1/10W
R1538	1-216-041-00	RES-CHIP	470	5%	1/10W
R1540	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1541	1-216-041-00	RES-CHIP	470	5%	1/10W
R1542	1-216-041-00	RES-CHIP	470	5%	1/10W
R1543	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1545	1-216-041-00	RES-CHIP	470	5%	1/10W
R1547	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1548	1-216-025-11	RES-CHIP	100	5%	1/10W
R1549	1-216-075-00	RES-CHIP	12K	5%	1/10W
R1551	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1552	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1553	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1554	1-216-033-00	RES-CHIP	220	5%	1/10W
R1556	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1559	1-216-041-00	RES-CHIP	470	5%	1/10W
R1560	1-216-041-00	RES-CHIP	470	5%	1/10W
R1561	1-216-041-00	RES-CHIP	470	5%	1/10W
R1562	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1563	1-216-041-00	RES-CHIP	470	5%	1/10W
R1566	1-216-041-00	RES-CHIP	470	5%	1/10W
R1567	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1568	1-216-041-00	RES-CHIP	470	5%	1/10W
R1569	1-216-049-11	RES-CHIP	1K	5%	1/10W

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*	A-1300-906-A	B10 BOARD COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C1305	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1307	1-164-346-11	CERAMIC CHIP	1UF		16V
C1310	1-126-947-11	ELECT	47UF	20.00%	16V
C1312	1-126-947-11	ELECT	47UF	20.00%	16V
C1330	1-126-964-11	ELECT	10UF	20.00%	50V

B10

REF NO.	PART NO.	DESCRIPTION		REMARK	
C1333	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1395	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C1396	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V
C1401	1-104-661-91	ELECT	330UF	20.00%	16V
C1402	1-126-947-11	ELECT	47UF	20.00%	25V
C1403	1-126-947-11	ELECT	47UF	20.00%	25V
C1404	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1405	1-126-947-11	ELECT	47UF	20.00%	25V
C1406	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1408	1-126-964-11	ELECT	10UF	20.00%	50V
C1410	1-126-947-11	ELECT	47UF	20.00%	25V
C1411	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1413	1-126-935-11	ELECT	470UF	20.00%	16V
C1414	1-164-346-11	CERAMIC CHIP	1UF		16V
C1415	1-126-947-11	ELECT	47UF	20.00%	25V
C1416	1-164-346-11	CERAMIC CHIP	1UF		16V
C1418	1-163-031-91	CERAMIC CHIP	0.01UF		50V
C1419	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1421	1-164-346-11	CERAMIC CHIP	1UF		16V
C1422	1-164-346-11	CERAMIC CHIP	1UF		16V
C1423	1-164-346-11	CERAMIC CHIP	1UF		16V
C1425	1-164-346-11	CERAMIC CHIP	1UF		16V
C1426	1-164-346-11	CERAMIC CHIP	1UF		16V
C1428	1-104-665-11	ELECT	100UF	20.00%	25V
C1429	1-104-663-11	ELECT	33UF	20.00%	25V
C1431	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1432	1-126-933-11	ELECT	100UF	20.00%	16V
C1433	1-126-947-11	ELECT	47UF	20.00%	16V
C1434	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1435	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1436	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C1439	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1440	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1441	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1442	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1443	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1444	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1445	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1446	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1447	1-126-964-11	ELECT	10UF	20.00%	50V
C1448	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1449	1-126-933-11	ELECT	100UF	20.00%	16V
C1457	1-164-346-11	CERAMIC CHIP	1UF		16V
C1459	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1460	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1461	1-164-346-11	CERAMIC CHIP	1UF		16V
C1462	1-164-346-11	CERAMIC CHIP	1UF		16V
C1464	1-126-933-11	ELECT	100UF	20.00%	16V
C3201	1-126-964-11	ELECT	10UF	20.00%	50V
C3202	1-136-171-00	FILM	0.33UF	5.00%	50V
C3203	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C3220	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3221	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3222	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3223	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3224	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3225	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C3226	1-126-964-11	ELECT	10UF	20.00%	50V
C3227	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3228	1-107-698-11	ELECT	10UF	20.00%	25V

REF NO.	PART NO.	DESCRIPTION		REMARK	
C3229	1-107-698-11	ELECT	10UF	20.00%	25V
C3238	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C3239	1-136-171-00	FILM	0.33UF	5.00%	50V
C3243	1-163-989-11	CERAMIC CHIP	0.033UF	10.00%	25V
C3244	1-164-346-11	CERAMIC CHIP	1UF		16V
C3245	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C3246	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C3247	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3248	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C3249	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3250	1-164-346-11	CERAMIC CHIP	1UF		16V
C3251	1-126-964-11	ELECT	10UF	20.00%	50V
C3252	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C3253	1-126-933-11	ELECT	100UF	20.00%	16V
C3254	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3255	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C3256	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3257	1-164-346-11	CERAMIC CHIP	1UF		16V
C3258	1-163-989-11	CERAMIC CHIP	0.033UF	10.00%	25V
C3259	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3260	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C3262	1-126-947-11	ELECT	47UF	20.00%	16V
C3264	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C3301	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3302	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3303	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3304	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3305	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3306	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3307	1-104-665-11	ELECT	100UF	20.00%	25V
C3308	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C3309	1-104-760-11	CERAMIC CHIP	0.047UF	10.00%	50V
C3310	1-104-760-11	CERAMIC CHIP	0.047UF	10.00%	50V
C3311	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C3312	1-164-489-11	CERAMIC CHIP	0.22UF	10.00%	16V
C3313	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C3314	1-164-489-11	CERAMIC CHIP	0.22UF	10.00%	16V
C3315	1-164-182-11	CERAMIC CHIP	0.0033UF	10.00%	50V
C3316	1-115-185-11	CERAMIC CHIP	0.033UF	10.00%	50V
C3317	1-163-009-91	CERAMIC CHIP	0.001UF	10.00%	50V
C3318	1-164-489-11	CERAMIC CHIP	0.22UF	10.00%	16V
C3319	1-110-501-11	CERAMIC CHIP	0.33UF	10.00%	16V
C3320	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3321	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3322	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3323	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C3324	1-126-964-11	ELECT	10UF	20.00%	50V
C3325	1-104-665-11	ELECT	100UF	20.00%	25V
C3326	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3327	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3328	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3329	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3330	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3331	1-164-489-11	CERAMIC CHIP	0.22UF	10.00%	16V
C3332	1-163-009-91	CERAMIC CHIP	0.001UF	10.00%	50V
C3333	1-115-185-11	CERAMIC CHIP	0.033UF	10.00%	50V
C3334	1-164-182-11	CERAMIC CHIP	0.0033UF	10.00%	50V
C3335	1-163-019-00	CERAMIC CHIP	0.0068UF	10.00%	50V
C3336	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C3337	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V

B10

REF NO.	PART NO.	DESCRIPTION		REMARK	
C3338	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C6200	1-216-295-91	SHORT CHIP	0		
C6202	1-128-550-11	ELECT	2200UF	20.00%	50V
C6203	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C6204	1-128-550-11	ELECT	2200UF	20.00%	50V
C6205	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6206	1-128-550-11	ELECT	2200UF	20.00%	50V
C6209	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6210	1-126-924-11	ELECT	330UF	20.00%	10V
C6211	1-126-924-11	ELECT	330UF	20.00%	10V
C6212	1-126-947-11	ELECT	47UF	20.00%	25V
C6213	1-126-964-11	ELECT	10UF	20.00%	50V
C6217	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C6220	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C6222	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C6223	1-126-960-11	ELECT	1UF	20.00%	50V
C6241	1-126-964-11	ELECT	10UF	20.00%	50V
C6244	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C6245	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C6249	1-216-295-91	SHORT CHIP	0		
		<CONNECTOR>			
CN1300 *	1-564-506-11	PLUG, CONNECTOR 3P			
CN1400 *	1-564-512-11	PLUG, CONNECTOR 9P			
CN1401 *	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P			
CN1403 *	1-564-506-11	PLUG, CONNECTOR 3P			
CN1405 *	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
CN1406 *	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
CN1407 *	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
CN1409	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P			
CN6200 *	1-564-507-11	PLUG, CONNECTOR 4P			
CN6204 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN6206 *	1-564-508-11	PLUG, CONNECTOR 5P			
		<DIODE>			
D1401	8-719-069-60	UDZSTE-179.1B			
D1402	8-719-069-60	UDZSTE-179.1B			
D1403	8-719-069-60	UDZSTE-179.1B			
D1404	8-719-069-60	UDZSTE-179.1B			
D1405	8-719-069-60	UDZSTE-179.1B			
D1406	8-719-069-60	UDZSTE-179.1B			
D1407	8-719-069-60	UDZSTE-179.1B			
D1408	8-719-069-60	UDZSTE-179.1B			
D1409	8-719-069-60	UDZSTE-179.1B			
D1410	8-719-069-60	UDZSTE-179.1B			
D1411	8-719-069-60	UDZSTE-179.1B			
D1412	8-719-069-60	UDZSTE-179.1B			
D1415	8-719-069-60	UDZSTE-179.1B			
D1416	8-719-069-60	UDZSTE-179.1B			
D1418	8-719-069-60	UDZSTE-179.1B			
D3201	8-719-988-61	1SS355TE-17			
D3203	8-719-988-61	1SS355TE-17			
D3301	8-719-404-50	MA111-TX			
D3302	8-719-404-50	MA111-TX			
D6210	8-719-914-42	DA204K			
D6211	8-719-404-50	MA111-TX			
D6212	8-719-404-50	MA111-TX			

REF NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC1401	8-752-068-46	CXA1855S	
IC1402	8-759-100-96	UPC4558G2	
IC1404	8-759-701-59	NJM78M09FA	
IC3200	8-759-100-96	UPC4558G2	
IC3202	8-759-100-96	UPC4558G2	
IC3204	8-759-100-96	UPC4558G2	
IC3205	8-752-058-68	CXA1315M	
IC3301	8-759-711-10	NJU4066BM	
IC3302	6-702-145-01	IC NJW1139GK1-TE2	
IC6200	8-759-168-24	TA8200AH	
		<JACK>	
J1401	1-784-646-11	TERMINAL, S	
J1402	1-778-387-11	JACK BLOCK, PIN 12P	
		<CHIP CONDUCTOR>	
JR1301	1-216-295-91	SHORT CHIP 0	
JR1405	1-216-295-91	SHORT CHIP 0	
JR1406	1-216-295-91	SHORT CHIP 0	
JR1407	1-216-295-91	SHORT CHIP 0	
JR1409	1-216-295-91	SHORT CHIP 0	
JR1410	1-216-295-91	SHORT CHIP 0	
JR1411	1-216-295-91	SHORT CHIP 0	
JR3204	1-216-295-91	SHORT CHIP 0	
JR3209	1-216-295-91	SHORT CHIP 0	
JR6200	1-216-295-91	SHORT CHIP 0	
JR6202	1-216-295-91	SHORT CHIP 0	
JR6203	1-216-295-91	SHORT CHIP 0	
JR6204	1-216-295-91	SHORT CHIP 0	
JR6206	1-216-295-91	SHORT CHIP 0	
		<COIL>	
L1313	1-414-187-11	INDUCTOR 47UH	
L1314	1-414-856-11	INDUCTOR 10UH	
L1315	1-414-856-11	INDUCTOR 10UH	
L1317	1-414-856-11	INDUCTOR 10UH	
L1404	1-412-537-31	INDUCTOR 100UH	
L3202	1-414-856-11	INDUCTOR 10UH	
		<TRANSISTOR>	
Q1316	8-729-216-22	2SA1162-G	
Q1317	8-729-230-49	2SC2712-YG	
Q1318	8-729-230-49	2SC2712-YG	
Q1323	8-729-230-49	2SC2712-YG	
Q1324	8-729-230-49	2SC2712-YG	
Q1365	8-729-230-49	2SC2712-YG	
Q1372	8-729-230-49	2SC2712-YG	
Q1402	8-729-216-22	2SA1162-G	
Q1403	8-729-230-49	2SC2712-YG	
Q1404	8-729-230-49	2SC2712-YG	
Q1408	8-729-230-49	2SC2712-YG	
Q1409	8-729-230-49	2SC2712-YG	
Q3201	8-729-224-62	2SK246-GR	
Q3202	8-729-230-49	2SC2712-YG	
Q3203	8-729-230-49	2SC2712-YG	

B10

REF NO.	PART NO.	DESCRIPTION			REMARK
Q3204	8-729-224-62	2SK246-GR			
Q6201	8-729-421-19	UN2213			
Q6203	8-729-421-19	UN2213			
Q6204	8-729-421-19	UN2213			
Q6208	8-729-421-19	UN2213			
		<RESISTOR>			
R1301	1-216-041-00	RES-CHIP	470	5%	1/10W
R1318	1-216-033-00	RES-CHIP	220	5%	1/10W
R1320	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1343	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1344	1-216-025-11	RES-CHIP	100	5%	1/10W
R1345	1-216-041-00	RES-CHIP	470	5%	1/10W
R1346	1-216-041-00	RES-CHIP	470	5%	1/10W
R1347	1-216-025-11	RES-CHIP	100	5%	1/10W
R1350	1-216-085-91	RES-CHIP	33K	5%	1/10W
R1359	1-216-025-11	RES-CHIP	100	5%	1/10W
R1360	1-216-041-00	RES-CHIP	470	5%	1/10W
R1361	1-216-041-00	RES-CHIP	470	5%	1/10W
R1362	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1363	1-216-033-00	RES-CHIP	220	5%	1/10W
R1364	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1365	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1366	1-216-295-91	SHORT CHIP	0		
R1368	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1369	1-216-025-11	RES-CHIP	100	5%	1/10W
R1370	1-216-041-00	RES-CHIP	470	5%	1/10W
R1371	1-216-039-00	RES-CHIP	390	5%	1/10W
R1372	1-216-041-00	RES-CHIP	470	5%	1/10W
R1397	1-216-045-00	RES-CHIP	680	5%	1/10W
R1400	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1403	1-216-033-00	RES-CHIP	220	5%	1/10W
R1404	1-216-295-91	SHORT CHIP	0		
R1406	1-216-013-00	RES-CHIP	33	5%	1/10W
R1407	1-216-033-00	RES-CHIP	220	5%	1/10W
R1408	1-216-031-00	RES-CHIP	180	5%	1/10W
R1409	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1410	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1411	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1412	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1413	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1414	1-216-025-11	RES-CHIP	100	5%	1/10W
R1417	1-216-025-11	RES-CHIP	100	5%	1/10W
R1418	1-216-025-11	RES-CHIP	100	5%	1/10W
R1421	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1424	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1425	1-216-047-91	RES-CHIP	820	5%	1/10W
R1426	1-216-025-11	RES-CHIP	100	5%	1/10W
R1427	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R1428	1-216-025-11	RES-CHIP	100	5%	1/10W
R1429	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1430	1-216-025-11	RES-CHIP	100	5%	1/10W
R1431	1-216-025-11	RES-CHIP	100	5%	1/10W
R1432	1-216-041-00	RES-CHIP	470	5%	1/10W
R1433	1-216-025-11	RES-CHIP	100	5%	1/10W
R1435	1-216-022-00	RES-CHIP	75	5%	1/10W
R1436	1-216-025-11	RES-CHIP	100	5%	1/10W
R1437	1-216-022-00	RES-CHIP	75	5%	1/10W
R1438	1-216-025-11	RES-CHIP	100	5%	1/10W
R1439	1-216-017-91	RES-CHIP	47	5%	1/10W
R1441	1-216-025-11	RES-CHIP	100	5%	1/10W
R1442	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1443	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1444	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1445	1-216-025-11	RES-CHIP	100	5%	1/10W
R1446	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1447	1-216-025-11	RES-CHIP	100	5%	1/10W
R1448	1-216-043-91	RES-CHIP	560	5%	1/10W
R1449	1-249-429-11	CARBON	10K	5%	1/4W
R1450	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1451	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1452	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1453	1-216-025-11	RES-CHIP	100	5%	1/10W
R1454	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1455	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1456	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1457	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1458	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1459	1-216-025-11	RES-CHIP	100	5%	1/10W
R1460	1-216-033-00	RES-CHIP	220	5%	1/10W
R1461	1-216-025-11	RES-CHIP	100	5%	1/10W
R1463	1-249-429-11	CARBON	10K	5%	1/4W
R1464	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1465	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1466	1-216-033-00	RES-CHIP	220	5%	1/10W
R1467	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1468	1-216-093-91	RES-CHIP	68K	5%	1/10W
R1469	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1470	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1471	1-216-022-00	RES-CHIP	75	5%	1/10W
R1472	1-216-033-00	RES-CHIP	220	5%	1/10W
R1473	1-216-033-00	RES-CHIP	220	5%	1/10W
R1475	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1476	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1477	1-216-047-91	RES-CHIP	820	5%	1/10W
R1478	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R1479	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1480	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1481	1-216-022-00	RES-CHIP	75	5%	1/10W
R1483	1-216-025-11	RES-CHIP	100	5%	1/10W
R1484	1-216-025-11	RES-CHIP	100	5%	1/10W
R1485	1-216-025-11	RES-CHIP	100	5%	1/10W
R1486	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1487	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1488	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1489	1-216-022-00	RES-CHIP	75	5%	1/10W
R1490	1-216-025-11	RES-CHIP	100	5%	1/10W
R1491	1-216-025-11	RES-CHIP	100	5%	1/10W
R1492	1-216-021-00	RES-CHIP	68	5%	1/10W
R1493	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1496	1-216-041-00	RES-CHIP	470	5%	1/10W
R1497	1-216-041-00	RES-CHIP	470	5%	1/10W
R1498	1-216-025-11	RES-CHIP	100	5%	1/10W
R1499	1-216-025-11	RES-CHIP	100	5%	1/10W
R1500	1-216-025-11	RES-CHIP	100	5%	1/10W
R1501	1-216-045-00	RES-CHIP	680	5%	1/10W
R1503	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1504	1-216-073-91	RES-CHIP	10K	5%	1/10W
R1505	1-216-022-00	RES-CHIP	75	5%	1/10W
R1506	1-216-033-00	RES-CHIP	220	5%	1/10W
R1507	1-216-025-11	RES-CHIP	100	5%	1/10W
R3200	1-216-121-11	RES-CHIP	1M	5%	1/10W
R3201	1-216-121-11	RES-CHIP	1M	5%	1/10W
R3202	1-216-097-11	RES-CHIP	100K	5%	1/10W

B10 C6

REF NO.	PART NO.	DESCRIPTION		REMARK	
R3203	1-216-121-11	RES-CHIP	1M	5%	1/10W
R3204	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R3205	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3206	1-216-039-00	RES-CHIP	390	5%	1/10W
R3207	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3219	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3220	1-216-097-11	RES-CHIP	100K	5%	1/10W
R3221	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3222	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3223	1-216-045-00	RES-CHIP	680	5%	1/10W
R3224	1-216-101-00	RES-CHIP	150K	5%	1/10W
R3229	1-216-025-11	RES-CHIP	100	5%	1/10W
R3230	1-216-025-11	RES-CHIP	100	5%	1/10W
R3231	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3232	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3233	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3234	1-216-039-00	RES-CHIP	390	5%	1/10W
R3235	1-216-101-00	RES-CHIP	150K	5%	1/10W
R3236	1-216-113-00	RES-CHIP	470K	5%	1/10W
R3237	1-216-045-00	RES-CHIP	680	5%	1/10W
R3238	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3239	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3240	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3241	1-216-093-91	RES-CHIP	68K	5%	1/10W
R3242	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3245	1-216-097-11	RES-CHIP	100K	5%	1/10W
R3246	1-216-045-00	RES-CHIP	680	5%	1/10W
R3251	1-216-101-00	RES-CHIP	150K	5%	1/10W
R3252	1-216-113-00	RES-CHIP	470K	5%	1/10W
R3253	1-216-045-00	RES-CHIP	680	5%	1/10W
R3254	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3255	1-216-121-11	RES-CHIP	1M	5%	1/10W
R3256	1-216-121-11	RES-CHIP	1M	5%	1/10W
R3257	1-216-097-11	RES-CHIP	100K	5%	1/10W
R3258	1-216-121-11	RES-CHIP	1M	5%	1/10W
R3259	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R3262	1-216-101-00	RES-CHIP	150K	5%	1/10W
R3263	1-216-093-91	RES-CHIP	68K	5%	1/10W
R3267	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3268	1-216-049-11	RES-CHIP	1K	5%	1/10W
R3269	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3271	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R3273	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3274	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R3301	1-216-079-00	RES-CHIP	18K	5%	1/10W
R3302	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3303	1-216-079-00	RES-CHIP	18K	5%	1/10W
R3304	1-216-077-91	RES-CHIP	15K	5%	1/10W
R3305	1-216-077-91	RES-CHIP	15K	5%	1/10W
R3306	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3307	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3308	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3309	1-216-025-11	RES-CHIP	100	5%	1/10W
R3310	1-216-025-11	RES-CHIP	100	5%	1/10W
R3311	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3312	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3313	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3314	1-216-073-91	RES-CHIP	10K	5%	1/10W
R3315	1-216-295-91	SHORT CHIP	0		
R3318	1-216-295-91	SHORT CHIP	0		
R6201	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6202	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6203	1-216-295-91	SHORT CHIP	0		
R6209	1-216-049-11	RES-CHIP	1K	5%	1/10W
R6219	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6245	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R6246	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R6254	1-216-021-00	RES-CHIP	68	5%	1/10W
R6255	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R6258	1-216-021-00	RES-CHIP	68	5%	1/10W
R6259	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R6278	1-216-295-91	SHORT CHIP	0		

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*	A-1401-899-A	C6 BOARD MOUNTED			
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	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C701	1-115-350-51	CERAMIC	0.0047UF		2KV
C702	1-102-114-00	CERAMIC	470PF	10.00%	50V
C708	1-102-114-00	CERAMIC	470PF	10.00%	50V
C709	1-102-114-00	CERAMIC	470PF	10.00%	50V
C710	1-102-114-00	CERAMIC	470PF	10.00%	50V
C712	1-102-115-00	CERAMIC	560PF	10.00%	50V
C713	1-102-112-00	CERAMIC	330PF	10.00%	50V
C714	1-102-112-00	CERAMIC	330PF	10.00%	50V
C716	1-126-933-11	ELECT	100UF	20.00%	16V
C717	1-107-651-11	ELECT	4.7UF	20.00%	250V
C718	1-102-106-00	CERAMIC	100PF	10.00%	50V
C1800	1-126-964-11	ELECT	10UF	20.00%	50V
C1803	1-126-964-11	ELECT	10UF	20.00%	50V
C1804	1-126-964-11	ELECT	10UF	20.00%	50V
C1809	1-126-942-61	ELECT	1000UF	20.00%	25V
C1810	1-102-106-00	CERAMIC	100PF	10.00%	50V
		<CONNECTOR>			
CN700	1-695-915-11	TAB (CONTACT)			
CN702	1-695-915-11	TAB (CONTACT)			
CN703	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN704	1-695-915-11	TAB (CONTACT)			
CN712	1-564-507-11	PLUG, CONNECTOR 4P			
CN1801	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN1802	* 1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D701	8-719-911-19	1SS119-25			
D702	8-719-911-19	1SS119-25			
D703	8-719-911-19	1SS119-25			
D704	8-719-911-19	1SS119-25			
D705	8-719-911-19	1SS119-25			
D706	8-719-911-19	1SS119-25			
D707	8-719-911-19	1SS119-25			
D708	8-719-911-19	1SS119-25			
D709	8-719-911-19	1SS119-25			
D710	8-719-911-19	1SS119-25			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

C6 **D2**

REF NO.	PART NO.	DESCRIPTION		REMARK
D711	8-719-911-19	1SS119-25		
D712	8-719-911-19	1SS119-25		
D716	8-719-911-19	1SS119-25		
D717	8-719-070-16	NNCD9.1A-T1		
D1803	8-719-911-19	1SS119-25		
D1804	8-719-911-19	1SS119-25		
D1808	8-719-908-03	GP08D		
		<IC>		
IC1800	8-759-822-38	LA6510		
		<JACK>		
J701	⚠ 1-540-071-22	SOCKET, CRT		
		<COIL>		
L701	1-410-667-31	INDUCTOR	22UH	
L703	1-414-185-41	INDUCTOR	22UH	
L705	1-414-185-41	INDUCTOR	22UH	
L707	1-414-185-41	INDUCTOR	22UH	
		<TRANSISTOR>		
Q701	8-729-326-11	2SC2611		
Q702	8-729-326-11	2SC2611		
Q703	8-729-326-11	2SC2611		
Q704	8-729-326-11	2SC2611		
Q705	8-729-326-11	2SC2611		
Q706	8-729-326-11	2SC2611		
Q707	8-729-200-17	2SA1091-O		
Q708	8-729-200-17	2SA1091-O		
Q709	8-729-200-17	2SA1091-O		
Q710	8-729-119-78	2SC2785-HFE		
Q711	8-729-119-78	2SC2785-HFE		
Q712	8-729-119-78	2SC2785-HFE		
Q714	8-729-255-12	2SC2551-O		
Q1800	8-729-119-76	2SA1175-HFE		
Q1802	8-729-119-78	2SC2785-HFE		
		<RESISTOR>		
R701	1-219-752-11	METAL	100K	5% 1/2W
R705	1-243-510-21	METAL OXIDE	1.8	5% 3W
R710	1-243-618-21	METAL OXIDE	10K	5% 3W
R711	1-260-328-11	CARBON	1K	5% 1/2W
R712	1-243-618-21	METAL OXIDE	10K	5% 3W
R713	1-260-330-11	CARBON	1.5K	5% 1/2W
R714	1-243-618-21	METAL OXIDE	10K	5% 3W
R715	1-260-330-11	CARBON	1.5K	5% 1/2W
R716	1-249-405-11	CARBON	100	5% 1/4W
R717	1-249-405-11	CARBON	100	5% 1/4W
R718	1-249-405-11	CARBON	100	5% 1/4W
R719	1-215-455-00	METAL	27K	1% 1/4W
R720	1-249-923-11	CARBON	1K	5% 1/4W
R722	1-249-923-11	CARBON	1K	5% 1/4W
R723	1-215-457-00	METAL	33K	1% 1/4W
R724	1-249-923-11	CARBON	1K	5% 1/4W
R725	1-249-424-11	CARBON	3.9K	5% 1/4W
R726	1-249-424-11	CARBON	3.9K	5% 1/4W
R727	1-249-424-11	CARBON	3.9K	5% 1/4W
R728	1-249-408-11	CARBON	180	5% 1/4W

REF NO.	PART NO.	DESCRIPTION		REMARK
R729	1-249-408-11	CARBON	180	5% 1/4W
R730	1-249-408-11	CARBON	180	5% 1/4W
R734	1-219-743-11	METAL	100	5% 1/2W
R738	1-247-807-31	CARBON	100	5% 1/4W
R739	1-247-807-31	CARBON	100	5% 1/4W
R740	1-247-807-31	CARBON	100	5% 1/4W
R747	1-215-926-00	METAL OXIDE	33K	5% 3W
R749	1-215-927-00	METAL OXIDE	47K	5% 3W
R751	1-215-926-00	METAL OXIDE	33K	5% 3W
R753	1-249-429-11	CARBON	10K	5% 1/4W
R755	1-249-427-11	CARBON	6.8K	5% 1/4W
R756	1-249-427-11	CARBON	6.8K	5% 1/4W
R757	1-249-427-11	CARBON	6.8K	5% 1/4W
R758	1-249-419-11	CARBON	1.5K	5% 1/4W
R759	1-249-419-11	CARBON	1.5K	5% 1/4W
R760	1-249-419-11	CARBON	1.5K	5% 1/4W
R1800	1-249-417-11	CARBON	1K	5% 1/4W
R1801	1-249-426-11	CARBON	5.6K	5% 1/4W
R1802	1-249-382-11	CARBON	1.2	5% 1/4W
R1803	1-249-382-11	CARBON	1.2	5% 1/4W
R1805	1-249-429-11	CARBON	10K	5% 1/4W
R1806	1-249-425-11	CARBON	4.7K	5% 1/4W
R1808	1-249-425-11	CARBON	4.7K	5% 1/4W
R1809	1-249-435-11	CARBON	33K	5% 1/4W
R1810	1-249-435-11	CARBON	33K	5% 1/4W
R1811	1-249-433-11	CARBON	22K	5% 1/4W
R1812	1-249-435-11	CARBON	33K	5% 1/4W
R1821	1-249-433-11	CARBON	22K	5% 1/4W
R1822	1-249-435-11	CARBON	33K	5% 1/4W
R1823	1-249-426-11	CARBON	5.6K	5% 1/4W
R1824	1-249-435-11	CARBON	33K	5% 1/4W
R1825	1-247-843-11	CARBON	3.3K	5% 1/4W
		<VARIABLE RESISTOR>		
RV702	1-241-656-11	RES, ADJ, METAL FILM 110M		
RV1801	1-238-019-11	RES, ADJ, CARBON 47K		

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* A-1343-979-A D2 BOARD MOUNTED
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<CAPACITOR>

C2801	1-130-479-00	MYLAR	0.0047UF	5.00%	50V
C2803	1-136-357-11	MYLAR	680PF	5.00%	50V
C2805	1-126-947-11	ELECT	47UF	20.00%	25V
C2806	1-136-559-11	MYLAR	0.0047UF	10.00%	400V
C2809	1-126-964-11	ELECT	10UF	20.00%	50V
C2810	1-102-228-00	CERAMIC	470PF	10.00%	500V
C2811	1-107-938-11	ELECT	0.47UF	20.00%	160V
C2813	1-107-636-11	ELECT	10UF	20.00%	160V
C2814	1-126-964-11	ELECT	10UF	20.00%	50V
C2817	1-102-244-00	CERAMIC	220PF	10.00%	500V
C2818	1-129-928-00	FILM	0.0027UF	5.00%	630V
C2819	1-126-947-11	ELECT	47UF	20.00%	25V
C2820	1-107-714-11	ELECT	10UF	20.00%	16V
C2821	1-130-469-00	MYLAR	680PF	5.00%	50V
C2822	1-106-375-12	MYLAR	0.022UF	10.00%	250V

D2

REF NO.	PART NO.	DESCRIPTION		REMARK	
C2824	1-126-947-11	ELECT	47UF	20.00%	25V
C2825	1-130-338-91	FILM	0.01UF	5.00%	630V
C2826	1-137-194-81	FILM	0.47UF	5.00%	50V
C2828	1-107-714-11	ELECT	10UF	20.00%	16V
C2829	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C2830	1-130-480-00	MYLAR	0.0056UF	5.00%	50V
C2832	1-126-960-11	ELECT	1UF	20.00%	50V
C2833	1-130-475-00	MYLAR	0.0022UF	5.00%	50V
C2834	1-106-220-00	MYLAR	0.1UF	10.00%	100V
C2835	1-216-295-91	SHORT CHIP	0		
C2837	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
C2840	1-137-466-11	MYLAR	0.082UF	5.00%	100V
C2841	1-136-177-00	FILM	1UF	5.00%	50V
C2842	1-130-477-00	MYLAR	0.0033UF	5.00%	50V
C2843	1-107-714-11	ELECT	10UF	20.00%	16V
C2900	1-130-480-00	MYLAR	0.0056UF	5.00%	50V
C2901	1-126-964-11	ELECT	10UF	20.00%	50V
		<CONNECTOR>			
CN2821 *	1-564-506-11	PLUG, CONNECTOR 3P			
CN2822 *	1-564-510-11	PLUG, CONNECTOR 7P			
CN2823	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D2801	8-719-988-61	1SS355TE-17			
D2803	8-719-063-73	DIODE D1NL20U-TR			
D2804	8-719-063-73	DIODE D1NL20U-TR			
D2806	8-719-302-43	EL1Z			
D2813	8-719-988-61	1SS355TE-17			
D2814	8-719-210-21	11EQS04			
D2815	8-719-911-19	1SS119-25			
D2816	8-719-911-19	1SS119-25			
		<IC>			
IC2801	8-759-700-07	NJM2903M			
IC2803	8-759-701-59	NJM78M09FA			
IC2805	8-759-510-71	BA10358F-E2			
IC2806	8-759-700-07	NJM2903M			
		<CHIP CONDUCTOR>			
JR2006	1-216-295-91	SHORT CHIP	0		
JR2803	1-216-295-91	SHORT CHIP	0		
JR2804	1-216-295-91	SHORT CHIP	0		
JR2805	1-216-295-91	SHORT CHIP	0		
		<COIL>			
L2801	1-406-677-11	INDUCTOR	10MH		
L2802	1-459-111-00	INDUCTOR	10MH		
L2803	1-414-502-21	INDUCTOR	33MH		
L2806	1-406-678-11	INDUCTOR	15MH		
		<TRANSISTOR>			
Q2802	8-729-216-22	2SA1162-G			
Q2805	8-729-216-22	2SA1162-G			
Q2806	8-729-010-25	MSD601-RT1			
Q2807	8-729-043-95	2SC3840(3)			
Q2811	8-729-931-45	IRF614			
Q2813	8-729-010-25	MSD601-RT1			
Q2821	8-729-010-25	MSD601-RT1			
Q2822	8-729-216-22	2SA1162-G			
Q2823	8-729-017-06	2SC4793			
Q2824	8-729-140-97	2SB734-34			
		<RESISTOR>			
R2801	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R2803	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2804	1-216-041-00	RES-CHIP	470	5%	1/10W
R2806	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2809	1-216-073-91	RES-CHIP	10K	5%	1/10W
R2812	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2813	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2816	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2820	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2821	1-249-412-11	CARBON	390	5%	1/4W
R2824	1-249-393-11	CARBON	10	5%	1/4W
R2825	1-216-037-00	RES-CHIP	330	5%	1/10W
R2827	1-216-041-00	RES-CHIP	470	5%	1/10W
R2830	1-215-899-11	METAL OXIDE	15K	5%	2W
R2831	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R2833	1-216-460-11	METAL OXIDE	3.9K	5%	2W
R2834	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R2837	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R2838	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R2839	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2840	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2843	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2844	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2846	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2847	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2857	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R2858	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R2859	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2860	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2861	1-216-107-00	RES-CHIP	270K	5%	1/10W
R2862	1-216-107-00	RES-CHIP	270K	5%	1/10W
R2866	1-216-073-91	RES-CHIP	10K	5%	1/10W
R2867	1-216-689-11	RES-CHIP	39K	5%	1/10W
R2869	1-216-113-00	RES-CHIP	470K	5%	1/10W
R2871	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2872	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2874	1-216-085-91	RES-CHIP	33K	5%	1/10W
R2877	1-216-421-11	METAL OXIDE	12	5%	1W
R2878	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2879	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2880	1-216-073-91	RES-CHIP	10K	5%	1/10W
R2882	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R2883	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R2884	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R2885	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2886	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R2887	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2888	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2889	1-216-101-00	RES-CHIP	150K	5%	1/10W
R2900	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2901	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2902	1-216-089-91	RES-CHIP	47K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

D2 **DH (KV-AR34N90 ONLY)** **F** **H1**

REF NO.	PART NO.	DESCRIPTION			REMARK
		<SWITCH>			
S2801	1-572-707-11	SWITCH, LEVER			
		<TRANSFORMER>			
T2801	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS			
**********					
*	A-1333-077-A	DH BOARD MOUNTED (KV-AR34N90 ONLY)			
		**********			
		<CAPACITOR>			
C3801	1-126-964-11	ELECT	10UF	20.00%	50V
C3804	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
C3805	1-126-964-11	ELECT	10UF	20.00%	50V
C3807	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
C3816	1-126-964-11	ELECT	10UF	20.00%	50V
C3819	1-126-960-11	ELECT	1UF	20.00%	50V
C3822	1-136-165-00	FILM	0.1UF	5.00%	50V
		<CONNECTOR>			
CN3802 *	1-564-507-11	PLUG, CONNECTOR 4P			
CN3803 *	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D3805	8-719-911-19	1SS119-25			
		<IC>			
IC3805	8-759-822-38	LA6510			
IC3807	1-418-597-11	SENSOR UNIT, MAGNETIC			
		<TRANSISTOR>			
Q3807	8-729-030-02	DTC144ESA			
Q3808	8-729-030-02	DTC144ESA			
Q3809	8-729-119-78	2SC2785-HFE			
Q3810	8-729-119-76	2SA1175-HFE			
Q3811	8-729-119-78	2SC2785-HFE			
Q3812	8-729-119-78	2SC2785-HFE			
		<RESISTOR>			
R3802	1-249-417-11	CARBON	1K	5%	1/4W
R3803	1-249-417-11	CARBON	1K	5%	1/4W
R3804	1-215-444-00	METAL	9.1K	1%	1/4W
R3805	1-249-417-11	CARBON	1K	5%	1/4W
R3807	1-215-413-00	METAL	470	1%	1/4W
R3808	1-247-883-00	CARBON	150K	5%	1/4W
R3809	1-247-876-11	CARBON	75K	5%	1/4W
R3810	1-249-425-11	CARBON	4.7K	5%	1/4W
R3814	1-249-411-11	CARBON	330	5%	1/4W
R3823	1-249-395-11	CARBON	15	5%	1/4W
R3825	1-249-417-11	CARBON	1K	5%	1/4W
R3828	1-249-377-11	CARBON	0.47	5%	1/4W
R3839	1-249-429-11	CARBON	10K	5%	1/4W
R3845	1-249-425-11	CARBON	4.7K	5%	1/4W
R3846	1-249-417-11	CARBON	1K	5%	1/4W
R3847	1-247-807-31	CARBON	100	5%	1/4W
R3848	1-249-417-11	CARBON	1K	5%	1/4W
R3849	1-249-377-11	CARBON	0.47	5%	1/4W
R3852	1-249-441-11	CARBON	100K	5%	1/4W
R3854	1-249-429-11	CARBON	10K	5%	1/4W
**********					
*	A-1401-812-A	F BOARD MOUNTED (KV-AR34M81)			
*	A-1241-456-A	F BOARD MOUNTED (KV-AR34N90)			
		**********			
	1-533-223-11	FUSE HOLDER		0A	0V
		<CAPACITOR>			
C654 ⚠	1-117-703-51	CERAMIC	0.0047UF	99%	250V
C4601 ⚠	1-113-511-11	MYLAR	0.47UF	20.00%	250V
C4602 ⚠	1-113-512-11	MYLAR	0.68UF	20.00%	250V
		<CONNECTOR>			
CN4601 *	1-580-843-11	PIN, CONNECTOR (POWER)			
CN4602 *	1-580-843-11	PIN, CONNECTOR (POWER)			
CN4603	1-695-915-11	TAB (CONTACT)			
		<FUSE>			
F4601 ⚠	1-576-334-11	FUSE		5A	250V
					5A/
		<RESISTOR>			
R4601 ⚠	1-219-759-91	METAL	1M	5%	1/2W
		<TRANSFORMER>			
T4601 ⚠	1-429-707-12	TRANSFORMER, LINE FILTER			
T4602 ⚠	1-435-214-11	TRANSFORMER, LINE FILTER			
**********					
*	A-1400-972-A	H1 BOARD MOUNTED			
		**********			
		<CAPACITOR>			
C3900	1-136-153-00	FILM	0.01UF	5.00%	50V
C3902	1-136-153-00	FILM	0.01UF	5.00%	50V
C3904	1-126-947-11	ELECT	47UF	20.00%	25V
C3905	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3906	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3910	1-126-947-11	ELECT	47UF	20.00%	16V
C3911	1-126-947-11	ELECT	47UF	20.00%	16V
C3913	1-126-960-11	ELECT	1UF	20.00%	50V

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

H1 H2 J

REF NO.		PART NO.	DESCRIPTION			REMARK
			<CONNECTOR>			
CN3901	*	1-564-507-11	PLUG, CONNECTOR 4P			
CN3902		1-564-509-11	PLUG, CONNECTOR 6P			
CN3904	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3905	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3907	*	1-564-521-11	PLUG, CONNECTOR 6P			
			<DIODE>			
D3900		8-719-070-16	NNCD9.1A-T1			
D3901		8-719-070-16	NNCD9.1A-T1			
D3905		8-719-070-16	NNCD9.1A-T1			
D3907		8-719-070-16	NNCD9.1A-T1			
D3908		8-719-070-16	NNCD9.1A-T1			
			<JACK>			
J3901		1-750-264-11	JACK			
J3902		1-784-646-11	TERMINAL, S			
J3903		1-770-329-13	JACK, PIN 3P			
			<COIL>			
L3901		1-414-183-41	INDUCTOR	10UH		
L3902		1-414-183-41	INDUCTOR	10UH		
			<TRANSISTOR>			
Q3901		8-729-030-02	DTC144ESA			
Q3902		8-729-030-02	DTC144ESA			
			<RESISTOR>			
R3900		1-249-411-11	CARBON	330	5%	1/4W
R3901		1-249-411-11	CARBON	330	5%	1/4W
R3902		1-247-804-11	CARBON	75	5%	1/4W
R3904		1-249-429-11	CARBON	10K	5%	1/4W
R3905		1-249-429-11	CARBON	10K	5%	1/4W
R3907		1-249-426-11	CARBON	5.6K	5%	1/4W
R3908		1-249-413-11	CARBON	470	5%	1/4W
R3909		1-249-417-11	CARBON	1K	5%	1/4W
R3910		1-249-420-11	CARBON	1.8K	5%	1/4W
R3911		1-249-411-11	CARBON	330	5%	1/4W
R3912		1-247-843-11	CARBON	3.3K	5%	1/4W
R3913		1-249-429-11	CARBON	10K	5%	1/4W
R3914		1-249-411-11	CARBON	330	5%	1/4W
R3915		1-249-429-11	CARBON	10K	5%	1/4W
R3916		1-249-401-11	CARBON	47	5%	1/4W
R3917		1-247-804-11	CARBON	75	5%	1/4W
R3918		1-247-807-31	CARBON	100	5%	1/4W
R3919		1-249-409-11	CARBON	220	5%	1/4W
R3920		1-247-807-31	CARBON	100	5%	1/4W
R3921		1-247-807-31	CARBON	100	5%	1/4W
R3922		1-249-421-11	CARBON	2.2K	5%	1/4W
			<SWITCH>			
S3902		1-692-431-21	SWITCH, TACTILE			
S3903		1-692-431-21	SWITCH, TACTILE			
S3904		1-692-431-21	SWITCH, TACTILE			
S3905		1-692-431-21	SWITCH, TACTILE			
S3906		1-692-431-21	SWITCH, TACTILE			
S3907		1-692-431-21	SWITCH, TACTILE			
S3908		1-692-431-21	SWITCH, TACTILE			

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	*	A-1400-973-A	H2 BOARD MOUNTED			
			**********			
	*	4-055-304-01	HOLDER, LED			
			<CAPACITOR>			
C3912		1-102-114-00	CERAMIC	470PF	10.00%	50V
			<CONNECTOR>			
CN3601	*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3602	*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3603	*	1-564-521-11	PLUG, CONNECTOR 6P			
			<DIODE>			
D3906		8-719-083-18	DIODE SPB-25MVWF			
			<IC>			
IC3901		6-600-129-01	IC RPM7140-H5			
			<SWITCH>			
S3601	⚠	1-571-433-31	SWITCH, PUSH (AC POWER)			

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	*	A-1400-975-A	J BOARD MOUNTED			
			**********			
			<CAPACITOR>			
C2410		1-126-967-11	ELECT	47UF	20.00%	50V
C2411		1-126-967-11	ELECT	47UF	20.00%	50V
C2412		1-126-967-11	ELECT	47UF	20.00%	50V
C2413		1-102-112-00	CERAMIC	330PF	10.00%	50V
C2414		1-102-112-00	CERAMIC	330PF	10.00%	50V
C2418		1-126-960-11	ELECT	1UF	20.00%	50V
C2419		1-126-960-11	ELECT	1UF	20.00%	50V
			<CONNECTOR>			
CN2410	*	1-564-523-11	PLUG, CONNECTOR 8P			
			<DIODE>			
D2410		8-719-070-16	NNCD9.1A-T1			
D2411		8-719-070-16	NNCD9.1A-T1			
D2412		8-719-070-16	NNCD9.1A-T1			
D2414		8-719-070-16	NNCD9.1A-T1			
D2415		8-719-070-16	NNCD9.1A-T1			

J **V1 (KV-AR34M81 only)**

REF NO.	PART NO.	DESCRIPTION			
		<JACK>			
J2410	1-784-623-11	BLOCK, PIN JACK 5P			
		<RESISTOR>			
R2410	1-247-804-11	CARBON	75	5%	1/4W
R2411	1-247-804-11	CARBON	75	5%	1/4W
R2412	1-247-804-11	CARBON	75	5%	1/4W
R2414	1-247-887-00	CARBON	220K	5%	1/4W
R2415	1-247-807-31	CARBON	100	5%	1/4W
R2417	1-247-887-00	CARBON	220K	5%	1/4W
R2418	1-247-807-31	CARBON	100	5%	1/4W
R2419	1-249-409-11	CARBON	220	5%	1/4W
R2420	1-249-409-11	CARBON	220	5%	1/4W
R2421	1-249-409-11	CARBON	220	5%	1/4W
**********					
*	A-1300-668-A	V1 BOARD COMPLETE (KV-AR34M81 ONLY)			
		**********			
		<CAPACITOR>			
C801	1-126-947-11	ELECT	47UF	20.00%	16V
C805	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C806	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C814	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C815	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C816	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C817	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C818	1-163-239-11	CERAMIC CHIP	33PF	5.00%	50V
C820	1-163-239-11	CERAMIC CHIP	33PF	5.00%	50V
C821	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C822	1-163-009-91	CERAMIC CHIP	0.001UF	10.00%	50V
C823	1-126-933-11	ELECT	100UF	20.00%	16V
C826	1-126-963-11	ELECT	4.7UF	20.00%	50V
C829	1-163-247-91	CERAMIC CHIP	68PF	5.00%	50V
C830	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C831	1-126-933-11	ELECT	100UF	20.00%	16V
C832	1-126-964-11	ELECT	10UF	20.00%	50V
C835	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C837	1-126-933-11	ELECT	100UF	20.00%	16V
		<CONNECTOR>			
CN801	* 1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
CN803	* 1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
		<DIODE>			
D802	8-719-941-09	DAP202U			
D803	8-719-105-46	RD3.3M-B2			
D804	8-719-105-91	RD5.6M-B2			
		<FERRITE BEAD>			
FB801	1-410-397-21	FERRITE	1.1UH		
FB802	1-410-397-21	FERRITE	1.1UH		
FB803	1-410-397-21	FERRITE	1.1UH		
FB804	1-414-223-11	INDUCTOR	470UH		
FB805	1-410-397-21	FERRITE	1.1UH		

REF NO.	PART NO.	DESCRIPTION			
		<IC>			
IC801	8-759-657-29	IC SAA5261PS/110			
		<CHIP CONDUCTOR>			
JR800	1-216-295-91	SHORT CHIP	0		
JR801	1-216-295-91	SHORT CHIP	0		
JR802	1-216-295-91	SHORT CHIP	0		
JR804	1-216-295-91	SHORT CHIP	0		
JR805	1-216-295-91	SHORT CHIP	0		
		<TRANSISTOR>			
Q801	8-729-120-28	2SC1623-L5L6			
Q803	8-729-120-28	2SC1623-L5L6			
Q805	8-729-120-28	2SC1623-L5L6			
Q806	8-729-120-28	2SC1623-L5L6			
Q807	8-729-120-28	2SC1623-L5L6			
Q808	8-729-120-28	2SC1623-L5L6			
Q810	8-729-120-28	2SC1623-L5L6			
Q811	8-729-019-01	2SD2394-EF			
Q817	8-729-421-22	UN2211			
		<RESISTOR>			
R800	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R801	1-216-295-91	SHORT CHIP	0		
R802	1-216-025-11	RES-CHIP	100	5%	1/10W
R803	1-216-295-91	SHORT CHIP	0		
R804	1-216-295-91	SHORT CHIP	0		
R805	1-216-295-91	SHORT CHIP	0		
R807	1-216-295-91	SHORT CHIP	0		
R813	1-216-295-91	SHORT CHIP	0		
R820	1-216-073-91	RES-CHIP	10K	5%	1/10W
R821	1-216-083-00	RES-CHIP	27K	5%	1/10W
R822	1-216-025-11	RES-CHIP	100	5%	1/10W
R824	1-216-295-91	SHORT CHIP	0		
R825	1-216-295-91	SHORT CHIP	0		
R827	1-216-295-91	SHORT CHIP	0		
R828	1-216-025-11	RES-CHIP	100	5%	1/10W
R829	1-216-025-11	RES-CHIP	100	5%	1/10W
R830	1-216-295-91	SHORT CHIP	0		
R831	1-216-295-91	SHORT CHIP	0		
R832	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R835	1-216-295-91	SHORT CHIP	0		
R839	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R841	1-216-025-11	RES-CHIP	100	5%	1/10W
R842	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R843	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R844	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R845	1-216-049-11	RES-CHIP	1K	5%	1/10W
R846	1-216-049-11	RES-CHIP	1K	5%	1/10W
R847	1-216-049-11	RES-CHIP	1K	5%	1/10W
R848	1-216-049-11	RES-CHIP	1K	5%	1/10W
R849	1-216-049-11	RES-CHIP	1K	5%	1/10W
R850	1-216-105-91	RES-CHIP	220K	5%	1/10W
R851	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R853	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R857	1-216-077-91	RES-CHIP	15K	5%	1/10W
R861	1-216-049-11	RES-CHIP	1K	5%	1/10W
R862	1-260-095-11	CARBON	470	5%	1/2W
R863	1-216-049-11	RES-CHIP	1K	5%	1/10W

V1 (KV-AR34M81 only) VM1

REF NO.	PART NO.	DESCRIPTION			REMARK
R864	1-216-041-00	RES-CHIP	470	5%	1/10W
R866	1-215-880-00	METAL OXIDE	10	5%	2W
R871	1-216-037-00	RES-CHIP	330	5%	1/10W
R879	1-216-073-91	RES-CHIP	10K	5%	1/10W
R880	1-216-041-00	RES-CHIP	470	5%	1/10W
R882	1-216-049-11	RES-CHIP	1K	5%	1/10W
R884	1-216-025-11	RES-CHIP	100	5%	1/10W
		<CRYSTAL>			
X801	1-578-774-11	VIBRATOR, CRYSTAL			

****

*	A-1401-901-A	VM1 BOARD MOUNTED	
		**********	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
		<CAPACITOR>	
C5900	1-102-115-00	CERAMIC	560PF 10.00% 50V
C5902	1-104-661-91	ELECT	330UF 20.00% 16V
C5903	1-161-830-00	CERAMIC	0.0047UF 500V
C5905	1-126-935-11	ELECT	470UF 20.00% 10V
C5906	1-130-491-00	MYLAR	0.047UF 5.00% 50V
C5907	1-107-638-11	ELECT	33UF 20.00% 160V
C5908	1-106-383-00	MYLAR	0.047UF 10.00% 200V
C5909	1-126-933-11	ELECT	100UF 20.00% 16V
C5910	1-130-471-00	MYLAR	0.001UF 5.00% 50V
C5911	1-107-949-11	ELECT	2.2UF 20.00% 160V
C5912	1-104-999-11	MYLAR	0.1UF 10.00% 200V
C5913	1-130-471-00	MYLAR	0.001UF 5.00% 50V
C5914	1-126-933-11	ELECT	100UF 20.00% 16V
C5916	1-130-491-00	MYLAR	0.047UF 5.00% 50V
C5917	1-126-935-11	ELECT	470UF 20.00% 10V
C5918	1-102-244-00	CERAMIC	220PF 10.00% 500V
C5919	1-136-165-00	FILM	0.1UF 5.00% 50V
		<CONNECTOR>	
CN2801	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN5901	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN5904	* 1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	
		<DIODE>	
D5901	8-719-911-19	1SS119-25	
D5902	8-719-110-86	RD39ES-B	
D5903	8-719-911-19	1SS119-25	
D5904	8-719-110-86	RD39ES-B	
D5905	8-719-911-19	1SS119-25	
D5906	1-249-406-11	CARBON	120 5% 1/4W
D5907	1-249-406-11	CARBON	120 5% 1/4W
		<COIL>	
L5901	1-414-187-11	INDUCTOR	47UH

REF NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q5901	8-729-230-45	2SC2458-YGR			
Q5902	8-729-809-26	2SA1606-E			
Q5903	8-729-230-45	2SC2458-YGR			
Q5904	8-729-119-76	2SA1175-HFE			
Q5905	8-729-230-45	2SC2458-YGR			
Q5906	8-729-809-29	2SC4159-E			
Q5907	8-729-230-45	2SC2458-YGR			
		<RESISTOR>			
R5901	1-249-401-11	CARBON	47	5%	1/4W
R5902	1-249-414-11	CARBON	560	5%	1/4W
R5903	1-247-734-11	CARBON	39	5%	1/2W
R5904	1-249-411-11	CARBON	330	5%	1/4W
R5905	1-249-417-11	CARBON	1K	5%	1/4W
R5906	1-249-417-11	CARBON	1K	5%	1/4W
R5907	1-249-417-11	CARBON	1K	5%	1/4W
R5908	1-249-383-11	CARBON	1.5	5%	1/4W
R5909	1-249-409-11	CARBON	220	5%	1/4W
R5910	1-249-403-11	CARBON	68	5%	1/4W
R5911	1-249-439-11	CARBON	68K	5%	1/4W
R5912	1-249-437-11	CARBON	47K	5%	1/4W
R5914	1-249-403-11	CARBON	68	5%	1/4W
R5915	1-249-429-11	CARBON	10K	5%	1/4W
R5916	1-249-419-11	CARBON	1.5K	5%	1/4W
R5917	1-249-416-11	CARBON	820	5%	1/4W
R5918	1-249-429-11	CARBON	10K	5%	1/4W
R5919	1-249-417-11	CARBON	1K	5%	1/4W
R5920	1-249-439-11	CARBON	68K	5%	1/4W
R5921	1-216-476-11	METAL OXIDE	180	5%	3W
R5922	1-249-414-11	CARBON	560	5%	1/4W
R5923	1-249-383-11	CARBON	1.5	5%	1/4W
R5925	1-249-400-11	CARBON	39	5%	1/4W
R5927	1-249-416-11	CARBON	820	5%	1/4W
R5929	1-215-880-00	METAL OXIDE	10	5%	2W

****

ACCESORRIES AND PACKING MATERIALS
****

	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)
	4-065-210-01	JOINT
*	4-074-148-01	BAG, PROTECTION
*	4-089-233-01	TRAY
*	4-089-234-01	CUSHION (UPPER)
*	4-089-235-01	CUSHION (LOWER)
*	4-091-358-01	INDIVIDUAL CARTON (KV-AR34M81)
*	4-091-060-01	INDIVIDUAL CARTON (KV-AR34N90)
	4-091-356-11	MANUAL INSTRUCTION (KV-AR34M81)
	4-091-357-11	MANUAL INSTRUCTION (KV-AR34M81)
	4-090-833-11	MANUAL, INSTRUCTION (KV-AR34N90)
	4-392-003-11	BAND, HOLD
	4-392-004-11	CLIP

REF NO.	PART NO.	DESCRIPTION	REMARK
**********			
		REMOTE COMMANDER **********	
	1-477-407-11	REMOTE COMMANDER (RM-995) (KV-AR34M81)	
	1-477-490-11	REMOTE COMMANDER (RM-996) (KV-AR34N90)	

REF NO.	PART NO.	DESCRIPTION	REMARK

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SONY

4-091-356-**11** (1)

Trinitron Color TV

Operating Instructions — GB

- Before operating the unit, please read this manual thoroughly and retain it for future reference.

Mode d'emploi — FR

- Avant de faire fonctionner cet appareil, lisez attentivement le présent mode d' emploi et conservez-le pour toute référence ultérieure.

دفترچه راهنما — PR

- قبل از تنظیم کردن دستگاه، لطفا دفترچه راهنما را با دقت بخوانید وبه منظور مراجعه بعدی ان رانگه دارید.

تعليمات التشغيل — AR

- قبل تشغيل الجهاز، يرجى قراءة هذا الدليل بصورة كاملة والاحتفاظ به للمراجعة مستقبلاً.

FD Trinitron

WEGA

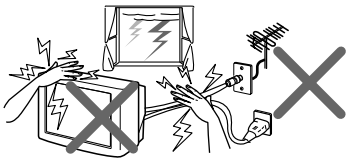
KV-AR34
KV-AR25

M81
M80

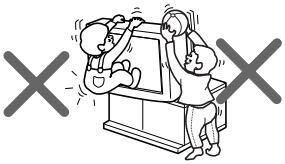
© 2002 Sony Corporation

WARNING

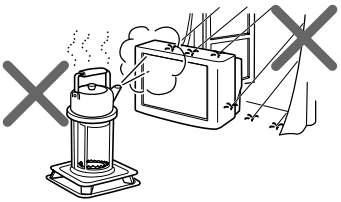
- Dangerously high voltages are present inside the TV.
- TV operating voltage: 110 – 240 V AC.
- Do not plug in the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.
- To avoid battery leakage and damage to the remote, remove the batteries from the remote if you are not going to use it for several days. If any liquid leaks from the batteries and touches your skin, immediately wash it away with water.



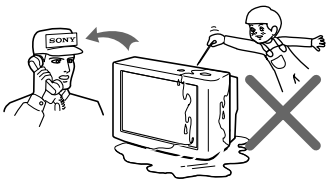
For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.



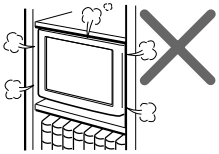
For children's safety, do not leave children alone with the TV. Do not allow children to climb onto it.



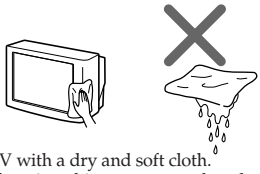
To prevent fire or shock hazard, do not expose the TV to rain or moisture.



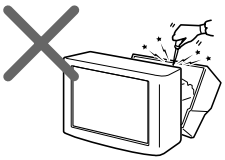
Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.



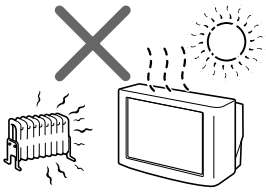
Do not block the ventilation openings of the TV. Do not install the TV in a confined space, such as a bookcase or built-in cabinet.



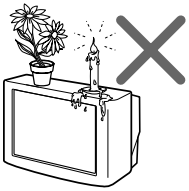
Clean the TV with a dry and soft cloth. Do not use benzine, thinner, or any other chemicals to clean the TV. Do not attach anything (e.g., adhesive tape, cellophane tape, glue) on the painted cabinet of the TV. Do not scratch the picture tube.



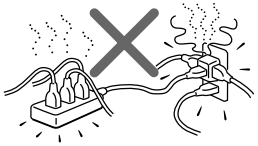
Do not open the cabinet and the rear cover of the TV as high voltages and other hazards are present inside the TV. Refer servicing and disposal of the TV to qualified personnel.



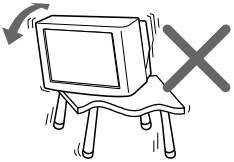
Your TV is recommended for home use only. Do not use the TV in any vehicle or where it may be subject to excessive dust, heat, moisture or vibrations.



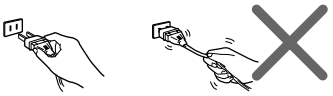
Do not place any objects on the TV.



Do not plug in too many appliances to the same power socket. Do not damage the power cord.



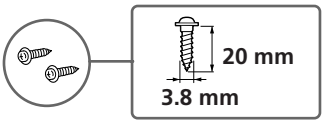
Install the TV on a stable TV stand and floor which can support the TV set weight. Ensure that the TV stand surface is flat and its area is larger than the bottom area of the TV.



Pull the power cord out by the plug. Do not pull the power cord itself. Even if your TV is turned off, it is still connected to the AC power source (mains) as long as the power cord is plugged in. Unplug the TV before moving it or if you are not going to use it for several days.

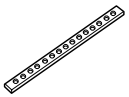
■ Securing the TV

To prevent the TV from falling, use the supplied screws, clamps and band to secure the TV.

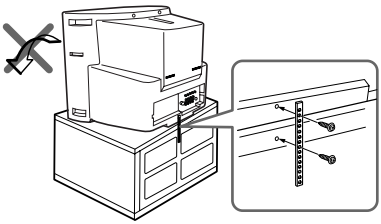


screws

clamps

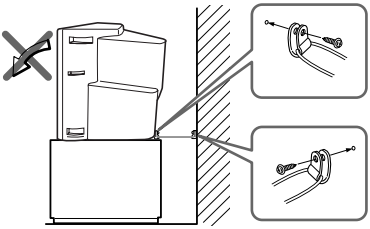


band



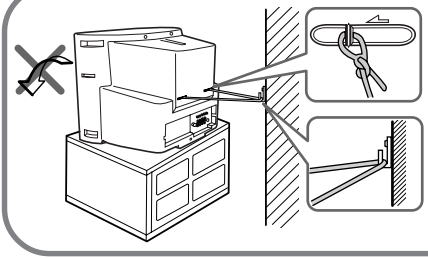
Screw the band to the TV stand and to the provided hole at the rear of your TV.

or



(1) Put a cord or chain through the clamps.
(2) Screw one clamp to a wall or pillar and the other clamp to the provided hole at the rear of your TV.

or



(1) Attach each end of a cord or chain to the provided holders at the rear of your TV.
(2) Securely fix the attached cord or chain to a wall or pillar using an attachment which can support the TV set weight.

Note

- Use only the supplied screws. Use of other screws may damage the TV.

Table of Contents

Installation

Getting Started **6**
Setting up your TV ("INITIAL SETUP") **7**

Overview of Controls

TV front and rear panels **8**
Remote control **9**

Advanced Operations

Selecting the picture and sound modes **11**
Viewing the picture in wide mode .. **12**
Listening with surround sound **12**
Setting the timers **13**
Viewing Teletext (KV-AR34M81 only) **14**

Menu Adjustment

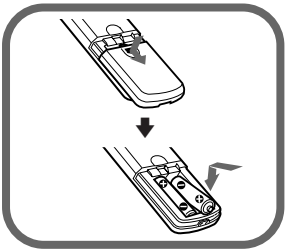
Introducing the menu system **15**
Changing the "PICTURE" setting ... **18**
Changing the "SOUND" setting **20**
Changing the "SETUP" setting **22**
Changing the Channel Preset ("CH PRESET") setting **24**

Additional Information

Connecting optional components ... **27**
Troubleshooting **29**
Specifications ..... **Back cover**

GB

■ Getting Started

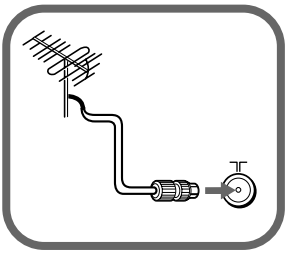


Step 1

Insert the batteries (supplied) into the remote.

Note

- Do not use old or different types of batteries together.

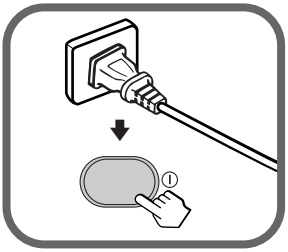


Step 2

Connect the antenna cable (not supplied) to ⊤ (antenna input) at the rear of the TV.

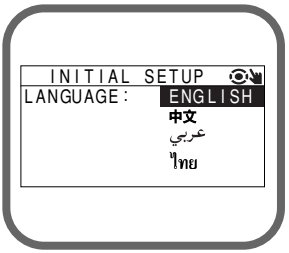
Tip

- You can also connect your TV to other optional components (see page 27).



Step 3

Plug in the power cord, then press ⏻ on the TV to turn it on.

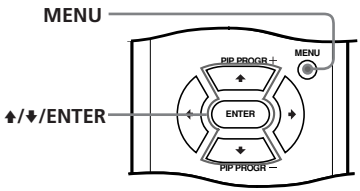


Step 4

Set up the TV by following the instructions of the "INITIAL SETUP"menu (see page 7).

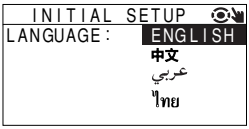
■ Setting up your TV ("INITIAL SETUP")

When you turn on your TV for the first time, the "INITIAL SETUP" menu will appear. This menu allows you to change the menu language, adjust the picture position and preset the TV channels automatically.



1 Press ↑ or ↓ to select the desired menu language (e.g.,"ENGLISH"), then press ENTER.

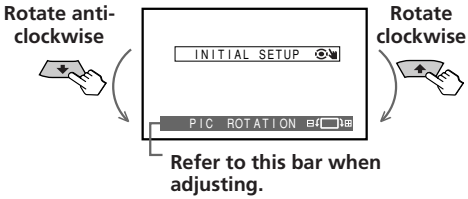
The selected menu language appears.



2 If the "PIC ROTATION" bar is slanted, press ↑ or ↓ to adjust it, then press ENTER.

If no adjustment is necessary, then press ENTER.

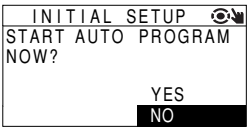
The ⊞ or ⊟ icon on the screen flashes while adjusting.

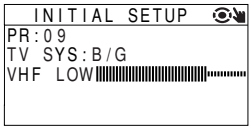


3 Press ↑ or ↓ to select "YES", then press ENTER to preset the channels automatically (see page 24).

The screen will indicate automatic presetting is in progress.

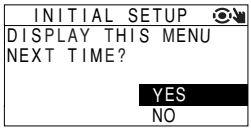
To skip automatic channel presetting, select "NO", then press ENTER.





4 Press ↑ or ↓ to select "NO", then press ENTER. The "INITIAL SETUP" menu will not appear again the next time you turn on the TV by pressing ⏻.

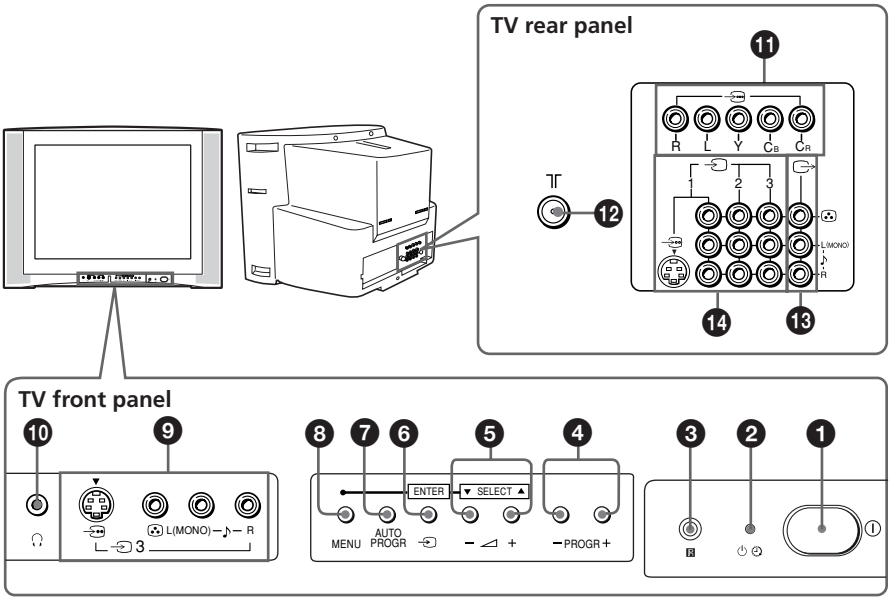
To allow this menu to appear again, select "YES", then press ENTER.



Tips

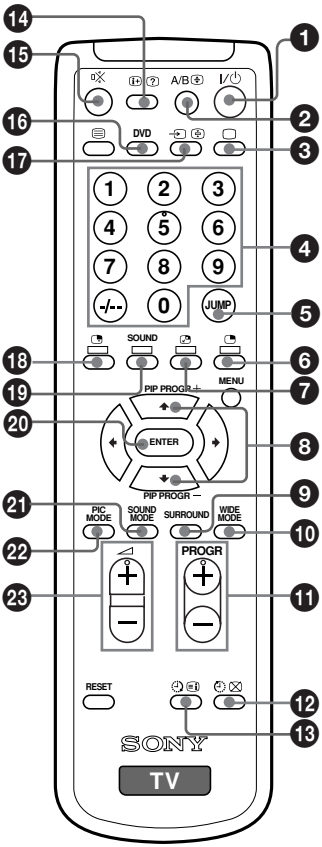
- You can immediately go to the end of the "INITIAL SETUP" menu by pressing MENU.
- You can also set up your TV using the menu system (see page 15).

■ TV front and rear panels



Button/Terminal	Function	Page
❶ ⏻	Turn off or turn on the TV.	6
❷ ⏻	Standby indicator.	–
❷ 🕘	Wake Up indicator.	13
❸	Remote control sensor.	–
❹ PROGR +/–	Select program number.	–
❺ ◿ +/–	Adjust volume.	–
❻ ⇥	Select TV or video input.	–
❼ AUTO PROGR	Preset channels automatically.	–
Menu operations		
❺ SELECT ▼/▲	Select and adjust items.	17
❻ ENTER	Confirm selected items.	17
❽ MENU	Display or cancel the menu.	17
❾ ⇥3	Video input terminal 3.	27
❿ 🎧	Headphone jack.	–
⓫ ⇥	Component video input terminal.	28
⓬ ⊤	Antenna input terminal.	27
⓭ ⇨	Monitor output terminal.	27
⓮ ⇥1, ⇥2, ⇥3	Video input terminal 1, 2, 3.	27

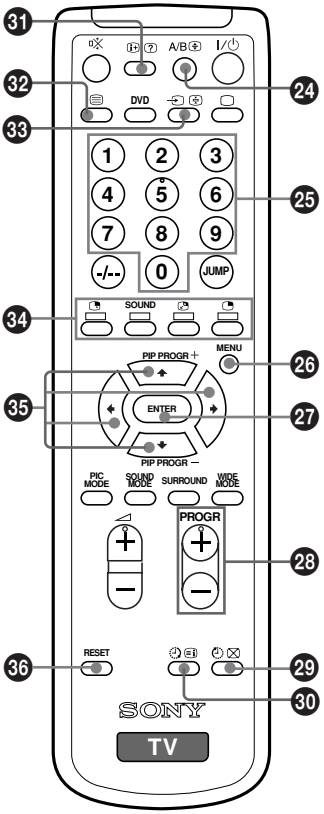
■ Remote control



Button	Function	Page
❶ I/⏻	Turn off temporarily or turn on the TV.	–
❸ ▭	Display the TV input.	–
❹ 0 – 9, -/--	Input numbers.	–
❺ JUMP	Jump to previous program number.	–
❾ SURROUND	Select surround mode.	12
❿ WIDE MODE	Select wide-mode (16:9).	12
⓫ PROGR +/–	Select program number.	–
⓮ ⓘ+	Display on-screen information.	–
⓯ 🔇	Mute the sound.	–
⓰ DVD	Select component video input.	28
⓱ ⇥	Select TV or video input.	27
㉑ SOUND MODE	Select sound mode.	11
㉒ PIC MODE	Select picture mode.	11
㉓ ◿ +/–	Adjust volume.	–
Timer operations		
⓬ ⏲	Set TV to turn off automatically.	13
⓭ ⏲	Set TV to turn on automatically.	13
PIP operations (yellow label)		
❻ ◳	Not function for your TV.	–
❼ ♪		
❽ PIP PROGR + / PIP PROGR –		
⓲ ◳		
⓳ SOUND		
⓴ ENTER		
Stereo/bilingual operations		
❷ A/B	Not function for your TV.	–

continue

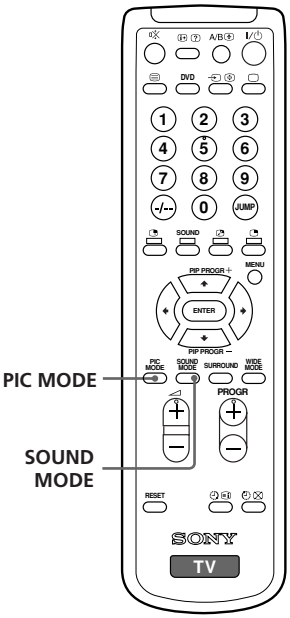
continued



Button	Function	Page
Menu operations		
㉖ MENU	Display or cancel the menu.	17
㉗ ENTER	Confirm selected items.	17
㉟ ↑, ↓, ←, →	Select and adjust items.	17
Teletext operations (green label) (KV-AR34M81 only)		
㉔ ⊕	Enlarge the Teletext display.	14
㉕ 0 – 9	Input Teletext page number.	14
㉘ PROGR +/–	Display the next or previous page.	14
㉙ ⊠	Show TV screen while waiting for Teletext page.	14
㉚ ⓘ	Display Teletext service contents.	14
㉛ ?	Reveal concealed information.	14
㉜ ☰	Display Teletext broadcast.	14
㉝ ⊟	Stop Teletext display from scrolling.	14
㉞ ■ (red, green, yellow, blue)	Access a FASTEXT menu.	14
㊱ RESET	Set TV to factory setting.	29

Selecting the picture and sound modes

You can select picture and sound modes and adjust the setting to your preference in the “PERSONAL” option.



Selecting the picture mode

Press PIC MODE to select the desired picture mode.

Select	To
“DYNAMIC”	view high contrast pictures.
“STANDARD”	view normal pictures.
“SOFT”	view mild pictures.
“PERSONAL”	receive the last adjusted picture setting from the “ADJUST” option in the “PICTURE” menu (see page 19).

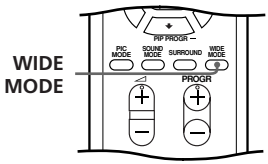
Selecting the sound mode

Press SOUND MODE to select the desired sound mode.

Select	To
“♪ DYNAMIC”	listen to dynamic and clear sound that emphasizes both the low and high tones.
“♪ DRAMA”	listen to sound that emphasizes voice and high tones.
“♪ SOFT”	listen to soft sound.
“♪ PERSONAL”	receive the last adjusted sound setting from the “ADJUST” option in the “SOUND” menu (see page 21).

■ Viewing the picture in wide mode

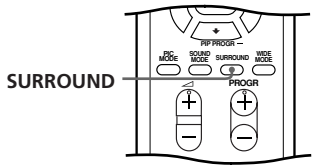
When receiving a wide-mode (16:9) signal, the picture will appear “squeezed” (compressed) on your screen. Use the WIDE MODE button to view the picture with the optimal effect.



Select	To
“ON”	view the picture in wide-mode (16:9).
“OFF”	cancel wide-mode (16:9).

■ Listening with surround sound

You can use the SURROUND button to listen to the sound effects of a concert hall or movie theater.



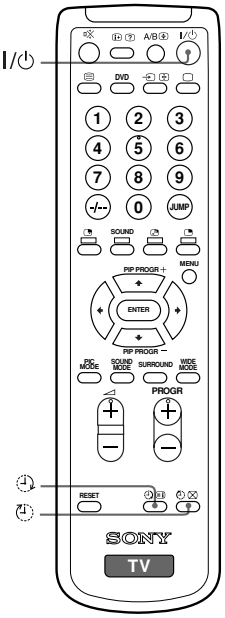
Select	To
“TruSurround”	listen to the surround sound that spreads out to the rear of a room.
“SIMULATED”	listen to monaural sound with a stereo-like effect.
“OFF”	cancel surround sound.

The surround of your TV is categorized as TruSurround.

TruSurround™ is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents.

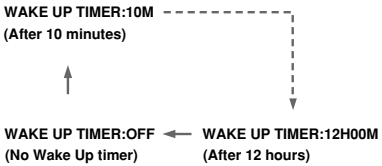
■ Setting the timers

You can set your TV to turn on and off automatically by using the Wake up timer and Sleep timer respectively.



Setting the Wake Up timer

1 Press 🕘 until the desired period of time appears on the screen.



The Wake Up timer starts immediately after you have set it.

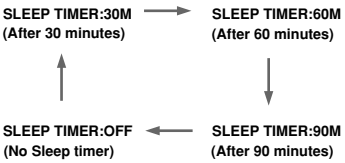
2 Select the program number or video input you want to wake up to.

3 Press I/⏻, or set the Sleep timer if you want the TV to turn off automatically.

The 🕘 indicator on the TV lights up orange when the TV goes into standby mode.

Setting the Sleep timer

Press 🕘 until the desired period of time appears on the screen.



The Sleep timer starts immediately after you have set it.

Notes

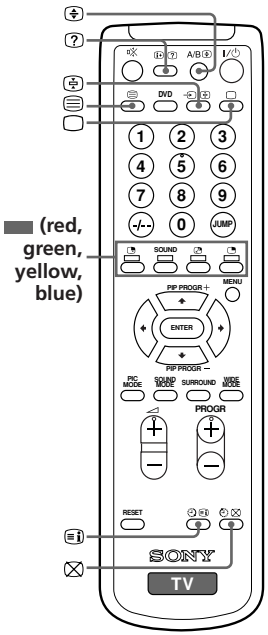
- You can also cancel the Wake Up and Sleep timers by pressing ⏻ on the TV to turn off the TV.
- If no buttons are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into standby mode.

■ Viewing Teletext

▶ KV-AR34M81 only

Some TV stations broadcast an information service called Teletext which allows you to receive various information, such as stock market reports and news.

You can use the buttons on the remote to view Teletext.



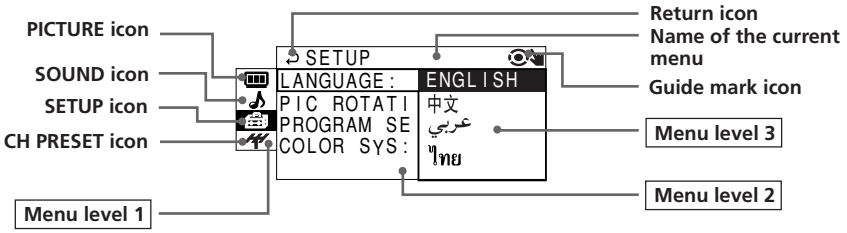
To	Do this
display a Teletext page on the TV picture	Press ▤. Each time you press ▤, the screen changes as follows: Teletext → Teletext and TV → TV. If there is no Teletext broadcast, "100" is displayed at the top left corner of the screen.
check the contents of a Teletext service	Press ⓘ. An overview of the Teletext contents, including page numbers, appears on the screen.
select a Teletext page	Press the number buttons to enter the three-digit page number of the desired Teletext page. If you make a mistake, reenter the correct page number. To access the next or previous page, press PROGR +/–.
hold (pause) a Teletext display	Press ⊕ to display the symbol "⊕" at the top left corner of the screen. To resume normal Teletext viewing, press ⊕ or ▤.
reveal concealed information (e.g., an answer to a quiz)	Press ?. To conceal the information, press the button again.
enlarge the Teletext display	Press ⊕. Each time you press ⊕, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.
stand by for a Teletext page while watching a TV program	1 Enter the Teletext page number that you want to refer to, then press ⊠. 2 When the page number is displayed, press ▤ to show the text.
select a FASTEXT menu or the colored boxes	Press ■ (red, green, yellow and blue) that corresponds to the desired menu or page number.
turn off Teletext	Press ▭.

Note

- The FASTEXT feature can be used only when the FASTEXT broadcast is available.

■ Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. The following is an overview of the menu system.



Level 1	Level 2	Level 3/Function	Page
"PICTURE"	"PICTURE MODE"	Select the picture mode: "DYNAMIC" → "STANDARD" → "SOFT" → "PERSONAL" → "ADJUST"	18
	"ADJUST"	Adjust the "PERSONAL" option: "PICTURE" → "COLOR" → "BRIGHT" → "HUE" → "SHARP"	
	"WIDE MODE"	Change the picture size: "ON" → "OFF"	
	"INTELLIGENT PIC"	Optimize picture quality: "ON" → "OFF"	
"SOUND"	"SOUND MODE"	Select the sound mode: "DYNAMIC" → "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST"	20
	"ADJUST"	Adjust the "PERSONAL" option: "BASS" → "TREBLE" → "BALANCE" → "BBE"*	
	"SURROUND"	Select the "SURROUND" mode: "TruSurround" → "SIMULATED" →"OFF"	
	"INTELLIGENT VOL"	Adjust volume automatically: "ON" → "OFF"	

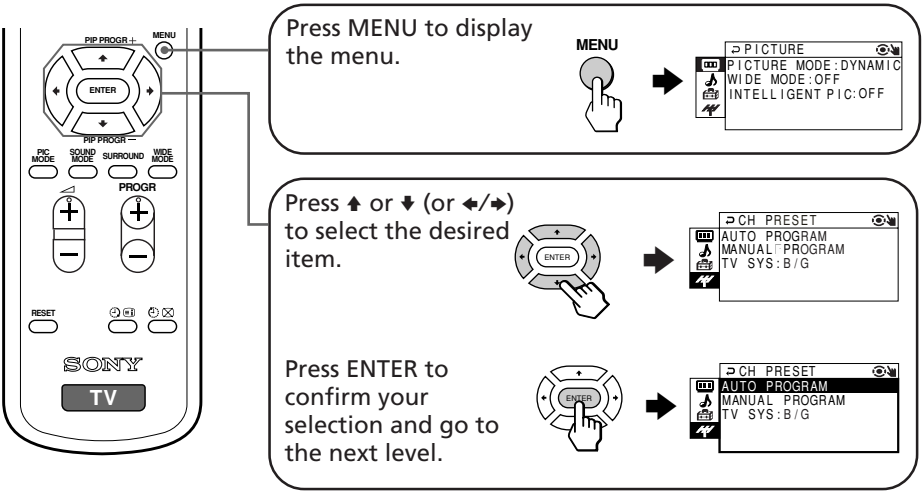
continue

continued

Level 1	Level 2	Level 3/Function	Page
"SETUP"	"LANGUAGE"	Change the menu language: "ENGLISH" → "中文"(Chinese) → "عربي"(Arabic) → "ไทย"(Thai)	22
	"PIC ROTATION"	Adjust the picture position.	
	"PROGRAM SETUP"	Adjust each program number settings.	
	"COLOR SYS"	Select the color system: "AUTO" →" PAL" → "SECAM" → "NTSC3.58" → "NTSC4.43"	
"CH PRESET"	"AUTO PROGRAM"	Preset channels automatically.	24
	"MANUAL PROGRAM"	Preset channels manually.	
	"TV SYS"	Select the TV system: "B/G" → "I" → "D/K" → "M"	

* The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

How to use the menu



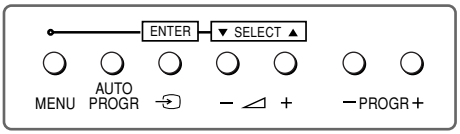
Other menu operations

To	Press
Adjust the setting value	↑, ↓, ← or →.
Move to the next/previous menu level	← or →.
Cancel the menu	MENU.

Tips

- If you want to exit from Menu level 2 to Menu level 1, press ↑ or ↓ until the return icon (⮌) is highlighted, then press ENTER.
- Some of the menu items can be operated directly using the remote buttons.
- The MENU, ENTER, and SELECT ▼/▲ buttons on the TV can also be used for the operations above.

Front of TV

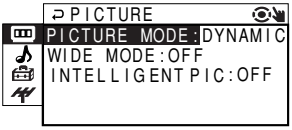


■ Changing the “PICTURE” setting

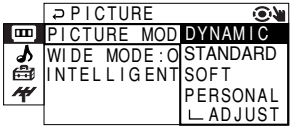
The “PICTURE” menu allows you to adjust the picture settings.

1 Press MENU.

2 Make sure the “PICTURE” icon ( ) is selected, then press ENTER.



3 Press ↑ or ↓ to select the desired item (e.g., “PICTURE MODE”), then press ENTER.



Select	To
“PICTURE MODE”	choose either “DYNAMIC”, “STANDARD”, “SOFT”, “PERSONAL”*, or “ADJUST” (see page 11).
“WIDE MODE”	choose either “ON” or “OFF” (see page 12).
“INTELLIGENT PIC”	optimize picture quality. Press ↑ or ↓ to select “ON”, then press ENTER. To cancel, select “OFF”, then press ENTER.

* When the “PERSONAL” mode is selected, you can receive the last adjusted picture settings from the “ADJUST” option (see page 19).

Adjusting the “ADJUST” items under “PICTURE MODE”

1 Press ↑ or ↓ to select the desired item (e.g.,“COLOR”), then press ENTER.

2 Adjust the value according to the following table, then press ENTER.

For	Press ↓ or ← to	Press ↑ or → to
“PICTURE”	decrease picture contrast.	increase picture contrast.
“COLOR”	decrease color intensity.	increase color intensity.
“BRIGHT”	darken the picture.	brighten the picture.
“HUE”	increase red picture tones.	increase green picture tones.
“SHARP”	soften the picture.	sharpen the picture.

3 Repeat the above steps to adjust other items.

The adjusted settings will be received when you select “PERSONAL”.

Notes

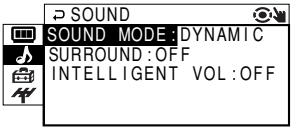
- “HUE” can be adjusted for the NTSC color system only.
- Reducing sharpness (“SHARP”) can also reduce picture noise.

■ Changing the “SOUND” setting

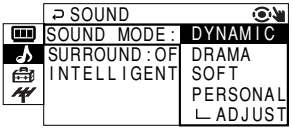
The “SOUND” menu allows you to adjust the sound settings.

1 Press MENU.

2 Press ↑ or ↓ to select the “SOUND” icon (♪), then press ENTER.



3 Press ↑ or ↓ to select the desired item (e.g., “SOUND MODE”), then press ENTER.

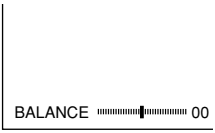


Select	To
“SOUND MODE”	choose either “DYNAMIC”, “DRAMA”, “SOFT”, “PERSONAL”*, or “ADJUST” (see page 11).
“SURROUND”	choose either “TruSurround”, “SIMULATED” or “OFF” (see page 12).
“INTELLIGENT VOL”	adjust the volume of all program numbers and video inputs automatically. Press ↑ or ↓ to select “ON”, then press ENTER. To cancel, select “OFF”, then press ENTER.

* When the “PERSONAL” mode is selected, you can receive the last adjusted sound settings from the “ADJUST” option (see page 21).

Adjusting the “ADJUST” items under “SOUND MODE”

1 Press ↑ or ↓ to select the desired item (e.g., “BALANCE”), then press ENTER.



2 Adjust the value according to the following table, then press ENTER.

For	Press ↓ or ← to	Press ↑ or → to
“BASS”	decrease the bass.	increase the bass.
“TREBLE”	decrease the treble.	increase the treble.
“BALANCE”	increase the left speaker’s volume.	increase the right speaker’s volume.
“BBE”	select “HIGH” for higher enhancement of sound clarity; select “LOW” for lower enhancement of sound clarity; select “OFF” to cancel BBE sound.	

3 Repeat the above steps to adjust other items.

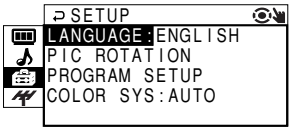
The adjusted settings will be received when you select “PERSONAL”.

■ Changing the “SETUP” setting

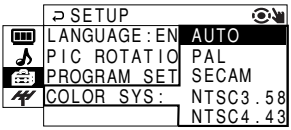
The “SETUP” menu allows you to change the menu language, adjust the picture position, set up your program numbers and select the color system.

1 Press MENU.

2 Press ↑ or ↓ to select the “SETUP” icon (), then press ENTER.



3 Press ↑ or ↓ to select the desired item (e.g., “COLOR SYS”), then press ENTER.

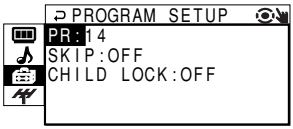


Select	To
“LANGUAGE”	change the menu language. Press ↑ or ↓ to select either “ENGLISH”, “中文” (Chinese), “ عربي ” (Arabic), or “ ไทย ” (Thai), then press ENTER. The selected menu language appears.
“PIC ROTATION”	adjust the picture position when it is not aligned with the TV screen. Press ↑ , → , ↓ or ← to adjust the picture position, then press ENTER.
“PROGRAM SETUP”	adjust each channel settings (see **Adjusting each program number settings (“PROGRAM SETUP”)** on page 23).
“COLOR SYS”	select the color system. Normally, set this to “AUTO”.

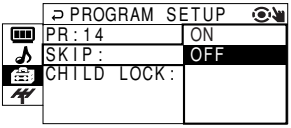
Adjusting each program number settings (“PROGRAM SETUP”)

1 Select “PROGRAM SETUP” from the “SETUP” menu.

2 Select “PR” and press ENTER. Press ↑ or ↓ to select the desired program number you want to adjust, then press ENTER.



3 Press ↑ or ↓ to select the desired item (e.g., “SKIP”), then press ENTER.



Select	To
“PR”	select the desired program number.
“SKIP”	skip unwanted or unused program number. Press ↑ or ↓ to select “ON”, then press ENTER. To cancel, select “OFF”, then press ENTER.
“CHILD LOCK”	prevent children from watching this selected program number. Press ↑ or ↓ to select “ON”, then press ENTER. The lock symbol (🔒) appears on the screen. To cancel, select “OFF”, then press ENTER. If you preset a locked program number, that program number will be unlocked automatically.

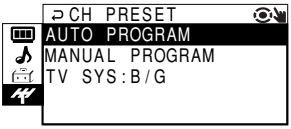
4 To continue adjusting other program numbers, press ↑ or ↓ to select “PR”, then repeat step 2 and 3.

■ Changing the Channel Preset ("CH PRESET") setting

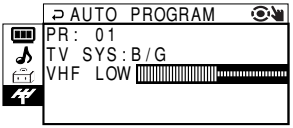
The "CH PRESET" menu allows you to preset channels automatically, manually preset channels and select the TV system.

1 Press MENU.

2 Press ↑ or ↓ to select the "CH PRESET" icon (), then press ENTER.



3 Press ↑ or ↓ to select the desired item (e.g., "AUTO PROGRAM"), then press ENTER.



Select	To
"AUTO PROGRAM"	preset channels automatically.
"MANUAL PROGRAM"	manually preset desired channels and channels that cannot be preset automatically (see **Presetting channels manually** on page 25).
"TV SYS"	select the TV system. Press ↑ or ↓ to select either "B/G", "I", "D/K" or "M", then press ENTER.

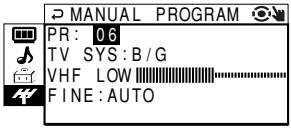
Note

- During automatic channel presetting, your TV screen will indicate "B/G" , "I", "D/K" or "M" for the TV system ("TV SYS").

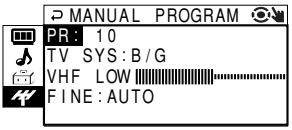
Presetting channels manually

1 After selecting "MANUAL PROGRAM", select the program number to which you want to preset a channel.

(1) Make sure "PR" is selected, then press ENTER.

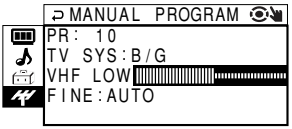


(2) Press ↑ or ↓ until the program number you want to preset (e.g., program number "10") appears on the menu, then press ENTER.

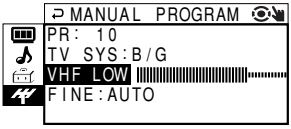


2 Select the desired channel.

(1) Make sure either "VHF LOW", "VHF HIGH", or "UHF" is selected, then press ENTER.

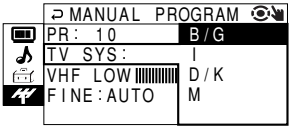


(2) Press ↑ or ↓ until the desired channel's broadcast appears on the TV screen, then press ENTER.

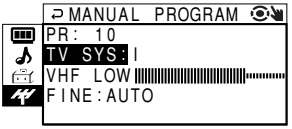


3 If the sound of the desired channel is abnormal, select the appropriate TV system.

(1) Press ↑ or ↓ to select "TV SYS", then press ENTER.



(2) Press ↑ or ↓ until the sound becomes normal, then press ENTER.



Tip

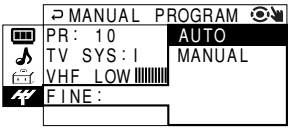
- You can also select the program number with the PROGR +/– or number buttons.

continue

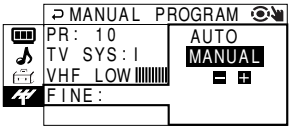
continued

4 If you are not satisfied with the picture and sound quality, you may be able to improve them by using the "FINE" tuning feature.

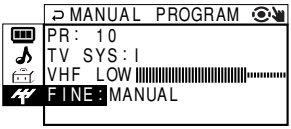
(1) Press ↑ or ↓ to select "FINE", then press ENTER.



(2) Press ↑ or ↓ to select "MANUAL", then press ENTER.



(3) Press ↑, ↓, ← or → until the picture and sound quality are optimal, then press ENTER.
The + or – icon on the menu flashes while tuning.

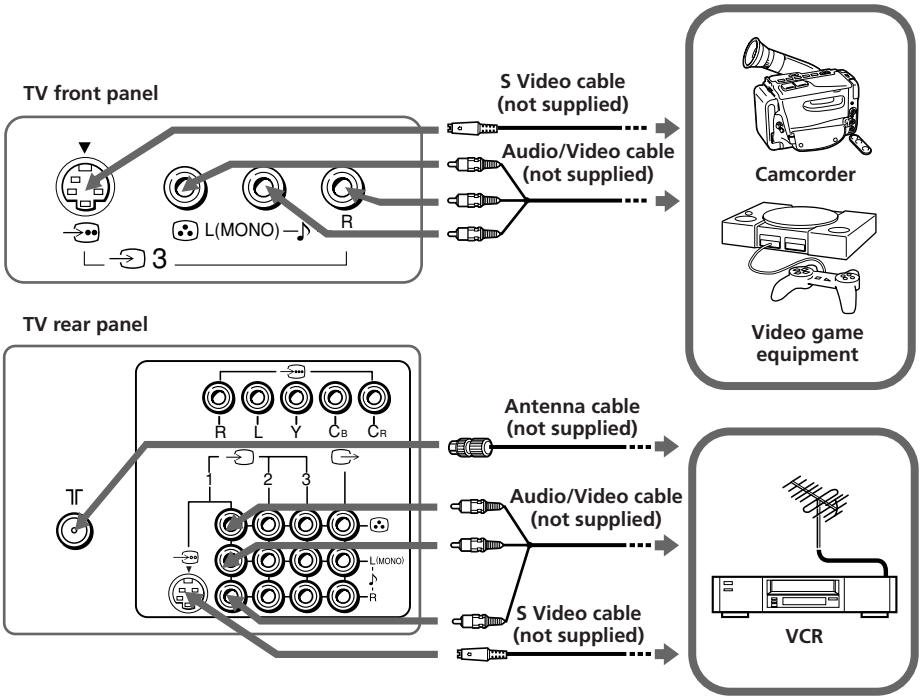


Note

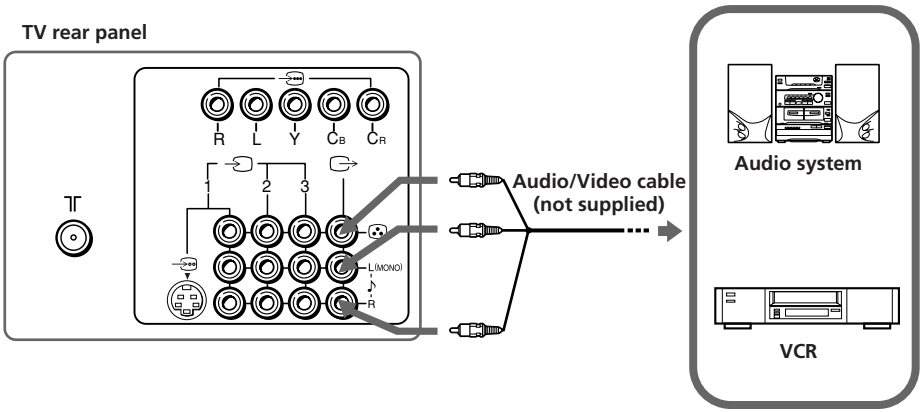
- If you connect a VCR to ⅂ (antenna input), preset the signal output from the VCR to the program number 0 on the TV.

■ Connecting optional components

Connecting to the video input terminal ( )



Connecting to the monitor output terminal ( )

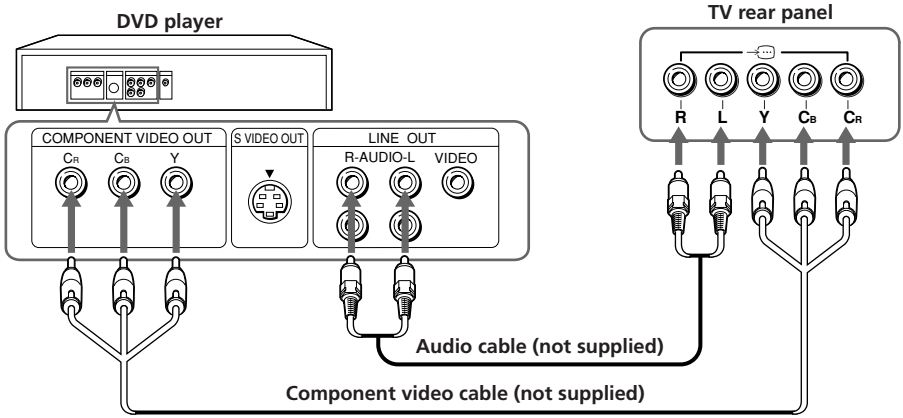


Connecting a DVD player to the component video input terminal ( )

1 Using an audio cable, connect R and L under (component video input) on your TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.

2 Using a component video cable, connect Y, C_B, and C_R under (component video input) on your TV to the COMPONENT VIDEO OUT Y, C_B, and C_R output connectors on your DVD player.

3 Press DVD on the remote to watch the (component video input) and "DVD" will appear on your screen.



Notes

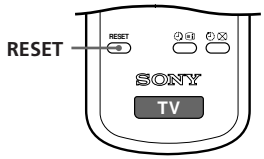
- If your DVD player can ouput interlace and progressive mode signals, select the interlace output when connecting to (component video input) on your TV. Your TV can receive either 525i/60Hz or 625i/50Hz interlace signals.
- Some DVD player terminals may be labeled differently:

Connect	To (on the DVD player)
Y (green)	Y
C_B (blue)	C_B, P_B, C_b or B-Y
C_R (red)	C_R, P_R, C_r or R-Y

- When both (S video) and (video) for 1 or 3 are connected at the same time, (S video) is automatically selected. To view (video), disconnect the S video cable.
- If you select "DVD" on your TV screen, the signal from the (monitor output) jacks will not be output properly. This does not indicate a malfunction.

■ Troubleshooting

If you have any problem while viewing your TV, you can either use the Reset function or check the Troubleshooting guide below. If the problem persists, contact your Sony dealer.

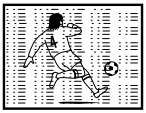


Reset function

Press the RESET button on your remote control. Your TV will go blank for about half a second then the picture will reappear with "RESET" displayed on your TV screen for about 10 seconds.

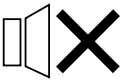
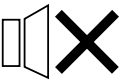
Pressing RESET will set your TV to the factory setting, but certain problems may be solved.

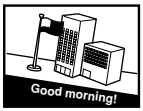
Troubleshooting guide

Symptom	Possible cause	Solutions	Page
Snowy picture 	• The connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR and at the wall.	27
	• The antenna setup is inappropriate.	• Check the antenna setup. Contact a Sony dealer for advice.	–
Noisy sound	• Channel presetting is inappropriate or incomplete.	• Display the "CH PRESET" menu and select "MANUAL PROGRAM" to preset the channel again.	25
	• Signal transmission is low.	• Try using a booster.	–
Distorted picture	• Broadcast signals are too strong.	• Turn off or disconnect the booster if it is in use.	–
Noisy sound			
Good picture	• The TV system setting is inappropriate.	• Display the "CH PRESET" menu and select the appropriate TV system ("TV SYS").	25
Noisy sound			

continue

continued

Symptom	Possible cause	Solutions	Page
No picture **No sound** 	• The power cord, antenna or VCR is not connected.	• Check the power cord, antenna and VCR connections.	27
	• The TV is not turned on.	• Press I/⏻ (power). • Press ⏻ (main power) on the TV to turn off the TV for about five seconds, then turn it on again.	9 8
Good picture **No sound** 	• The volume level is too low.	• Press + to increase the volume level.	9
	• The sound is muted.	• Press 🔇 to cancel the muting.	9
Dotted lines or stripes 	• There is local interference from cars, neon signs, hair dryers, power generators, etc.	• Do not use a hair dryer or other equipment near the TV. • Check the antenna setup. Contact a Sony dealer for advice.	– –
Double images or "ghosts" 	• Broadcast signals are reflected by nearby mountains or buildings.	• Use a highly directional antenna. • Use the fine tuning ("FINE") function.	– 26
	• The antenna setup is inappropriate.	• Check the antenna setup. Contact a Sony dealer for advice.	–
	• Use of a booster is inappropriate.	• Turn off or disconnect the booster if it is in use.	–
No color 	• The color level setting is too low.	• Display the "PICTURE" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level.	19
	• The color system setting is inappropriate.	• Display the "SETUP" menu and check the color system ("COLOR SYS") setting (usually set this to "AUTO").	22
	• The antenna setup is inappropriate.	• Check the antenna setup. Contact a Sony dealer for advice.	–

Symptom	Possible cause	Solutions	Page
Picture slant 	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.	• Keep external speakers or other electrical equipment away from the TV. • Display the "SETUP" menu and adjust "PIC ROTATION" so that the picture position is optimal.	– 22
Abnormal color patches 	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.	• Keep external speakers or other equipment away from the TV. Do not move the TV while the TV is turned on. Press ⏻ (main power) on the TV to turn off the TV for about 15 minutes, then turn it on again to demagnetize the TV.	–
"100" appears at the top of the screen and there is no Teletext display. (KV-AR34M81 only)	• The channel carries no Teletext broadcast.	—	14
Teletext display is incomplete (snowy picture or double images). (KV-AR34M81 only)	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR, and at the wall.	27
	• The antenna setup is inappropriate.	• Check the antenna setup. Contact a Sony dealer for advice.	–
	• Signal transmission is too low.	• Try using a booster. • Use the fine tuning ("FINE") function.	– 26
The ⏻ (standby) indicator on your TV flashes red several times between three-second intervals.	• Your TV's self-diagnosis function indicates the possible problems.	• Count the number of times the ⏻ (standby) indicator flashes. Press ⏻ (main power) to turn off your TV. Contact your nearest Sony service center.	–

continue

continued

Symptom	Possible cause	Solutions	Page
TV cabinet creaks.	• Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.	—	–
A small "boom" sound is heard when the TV is turned on.	• The TV's demagnetizing function is working. This does not indicate a malfunction.	—	–

■ Specifications

	KV-AR34M81	KV-AR25M80	Note
Power requirements	110-240 V AC, 50/60 Hz		
Power consumption (W)	Indicated on the rear of the TV		
Television system	B/G, I, D/K, M		
Color system	PAL, PAL 60, SECAM, NTSC3.58, NTSC4.43		
Teletext language	English, Farsi (Persian), French		KV-AR34M81 only
Channel coverage			
B/G	VHF : E2 to E12 UHF : E21 to E69 CATV : S01 to S03, S1 to S41		
I	UHF : B21 to B68 CATV : S01 to S03, S1 to S41		
D/K	VHF : C1 to C12, R1 to R12 UHF : C13 to C57, R21 to R60 CATV : S01 to S03, S1 to S41, Z1 to Z39		
M	VHF : A2 to A13 UHF : A14 to A79 CATV : A-8 to A-2, A to W+4, W+6 to W+84		
(Antenna)	75-ohm external terminal		
Audio output (Speaker)	8W +8W		
Number of terminal			
(Video)	Input: 4* Output: 1	Phono jacks; 1 Vp-p, 75 ohms	* Three input lines available
(Audio)	Input: 4* Output: 1	Phono jacks; 500 mVrms	* Three input lines available
(S Video)	Input: 2	Y: 1 Vp-p, 75 ohms, unbalanced, sync negative C: 0.286 Vp-p, 75 ohms	
(Component Video)	Input: 1	Phono jacks; Y: 1 Vp-p, 75 ohms, sync negative C_B: 0.7 Vp-p, 75 ohms C_R: 0.7 Vp-p, 75 ohms Audio: 500 mVrms	
(Headphone)	Output: 1	Stereo minijack	
Picture tube	34 in.	25 in.	
Tube size (cm)	86	64	Measured diagonally
Screen size (cm)	80	60	Measured diagonally
Dimensions (w/h/d, mm)	896 × 686 × 569	650 × 517 × 496	
Mass (kg)	79	39	

Design and specifications are subject to change without notice.

http://www.sony.net/

Sony Corporation

SONY

4-090-833-**11** (1)

Trinitron Color TV

使用說明書 CT

• 使用本電視機之前請先詳細閱讀此手冊，並妥善保存以備日後用作參考。

FD Trinitron
WEGA

KV-AR34
KV-AR29
KV-AR25

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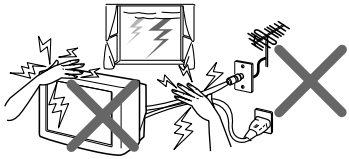
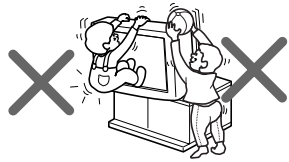
N90

警告

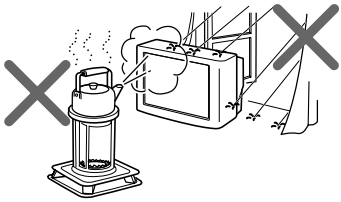
- 本電視機內存在危險性高電壓。
- 本電視機僅可在 110 伏特交流電壓下操作。
- 若未完成所有連接程序，請勿插入電源線；否則極少量的電流可能經天線或其它端子外泄。
- 若打算近期內不使用遙控器，請將電池取出，以避免電池泄漏而損壞遙控器。若您不小心觸及電池所泄漏的液體，應立即用水洗淨。



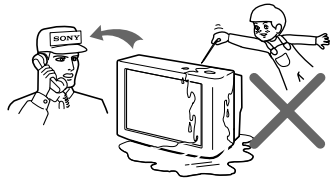
爲了個人安全起見，雷雨期間，請勿觸摸電視機的任何部份，包括電源線和天線電纜。



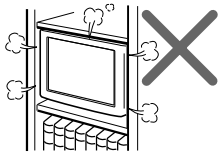
爲了兒童安全起見，請勿讓他們獨自逗留在電視機旁。千萬別讓兒童攀爬本電視機。



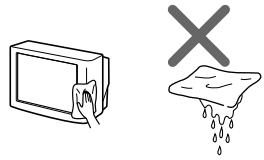
爲防止火災或觸電，請勿使本電視機被雨淋或受潮。



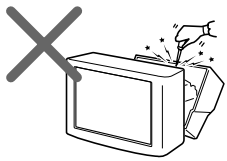
若有任何液體流入或固體落入本電視機內時，請勿操作本電視機。應立即請合格的專業人員檢查。



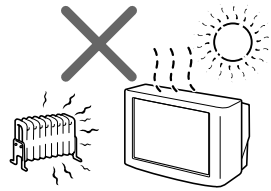
請勿堵塞本電視機的通風口。
請勿將本電視機放置於諸如書架或嵌入式壁櫥等封閉之處。



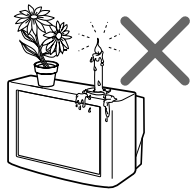
請用乾的軟布清潔本電視機。請勿在電視機殼噴涂表面貼附任何物體（例如，貼紙，透明玻璃膠紙，膠合劑等）。請勿使用汽油、稀釋劑或任何其它化學品清潔本電視機。請勿刮劃顯像管。



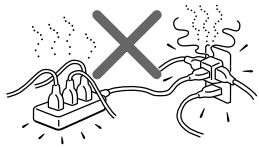
請勿打開本電視機的機殼和後蓋，因爲電視機內存在高電壓和危險性部件。須由合格的專業人員對電視機進行檢修或棄置。



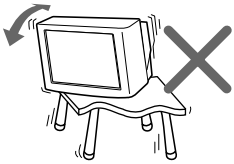
本電視機只適於家庭使用。請勿將本電視機放置於任何交通工具內或多塵、高溫、潮濕或震動頻繁之處。



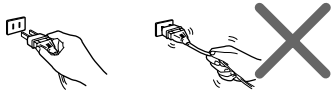
請勿放置任何物體於電視機上。



請勿在同一電源插座上插入太多的電器。請勿損壞電源線。



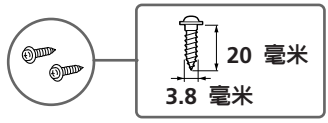
放置電視機於穩定的、並足以支撐電視機重量的電視支架及地面上。確保電視支架的表面平整且表面積大於電視機底面。



捏住插頭將電源線拔開。請勿直接拉拔電源線。即使電視機已斷開電源，但只要電源線還在插座內，它仍接通至交流電源。若想移動本電視機或打算近期內不使用本電視機時，請將電源線拔開。

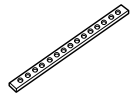
■ 固定電視機

爲防止電視機摔落，請使用所提供的螺絲、夾子和帶條以固定電視機。

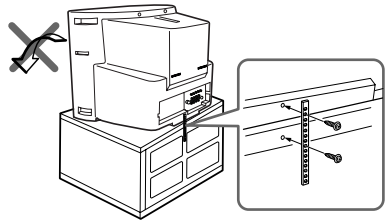


螺絲

夾子

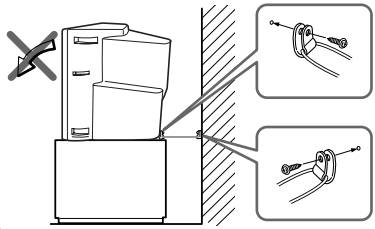


帶條



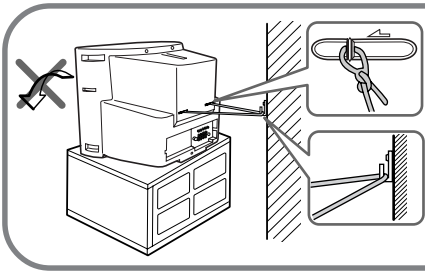
將帶條分別固定至電視機背後提供的螺絲孔及電視支架上。

或



(1) 將一根繩索或鏈條穿過夾子。
(2) 將其中一個夾子固定至牆上或柱子上，而另一個夾子則固定至電視機背後提供的螺絲孔上。

或



(1) 將繩索或鏈條的未端分別穿過電視機背後提供的柄上。
(2) 用可支撐電視機重量的連接物將繩索或鏈條固定至牆上或柱子上。

注

- 請僅使用提供的螺絲。使用其它螺絲可能會損壞本電視機。

目錄

設置您的電視機

準備工作 6
設定您的電視機（“原始設定”） 7

控制鍵總概況

電視機前面和背後的控制板 8
遙控器 9

高級操作

選擇畫質和音效模式 11
觀看寬螢幕模式的圖像 12
收聽環繞音效 12
設置定時器 13
欣賞立體聲或雙語言節目 14

調整您的設定（MENU）

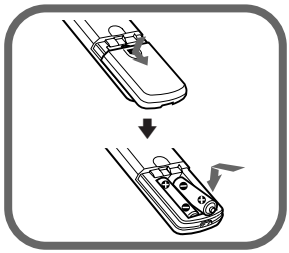
介紹選單系統 15
調整“畫面設定” 18
調整“聲音設定” 20
調整“系統設定”選單 22
調整“頻道預設”設定 24

附加信息

連接選購的裝置 25
故障檢修 27
規格 30

CT

■ 準備工作

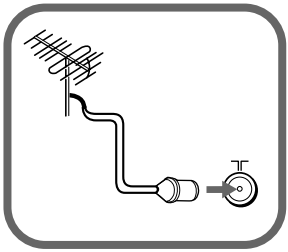


步驟 1

將所提供的電池裝入遙控器。

注

- 請勿使用舊電池或同時使用不同類型的電池。

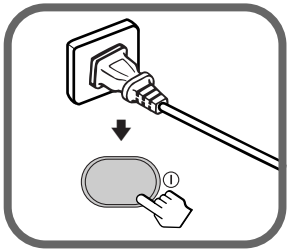


步驟 2

將天線電纜（未提供）連接至電視機背後的 ┐┌（天線輸入）端子。

提示

- 您也可將本電視機連接至其它選購的裝置（參考第 25 頁）。



步驟 3

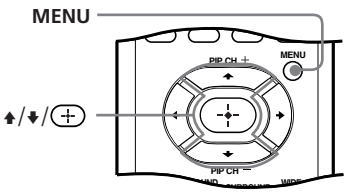
插入電源線，然後按壓電視機上的 ⏻（電源）鍵以接通電視機的電源。

步驟 4

按照“原始設定”的指示以設定您的電視機（參考第 7 頁）。

■ 設定您的電視機（“原始設定”）

當您第一次打開電視機時，“原始設定”選單將會顯示在畫面上。這選單可讓您改變選單語言，調整圖像位置，以及自動預設頻道。



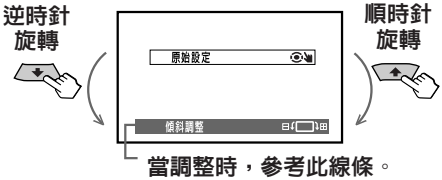
1 **按壓 ↑ 或 ↓ 鍵以選擇所要的選單語言（例如，“中文”），然後按壓 ⊕ 鍵。**

被選擇的選單語言將顯示在畫面上。

2 **若“傾斜調整”線條傾斜，按壓 ↑ 或 ↓ 鍵以作出調整，然後按壓 ⊕ 鍵。**

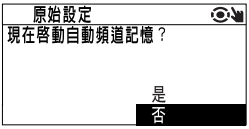
若不需作出調整，則按壓 ⊕ 鍵。

畫面上的 ⊞ 或 ⊟ 符號將會在調諧時閃爍。



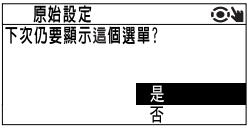
3 **按壓 ↑ 或 ↓ 鍵以選擇“是”，然後按壓 ⊕ 鍵以自動預設頻道（參考第 24 頁）。**

若要略掉自動預設頻道，選擇“否”，然後按壓 ⊕ 鍵。



4 **按壓 ↑ 或 ↓ 鍵以選擇“否”，然後按壓 ⊕ 鍵。則當您再次按壓 ⏻ 鍵打開電視機時，“原始設定”選單將不會再顯示在畫面上。**

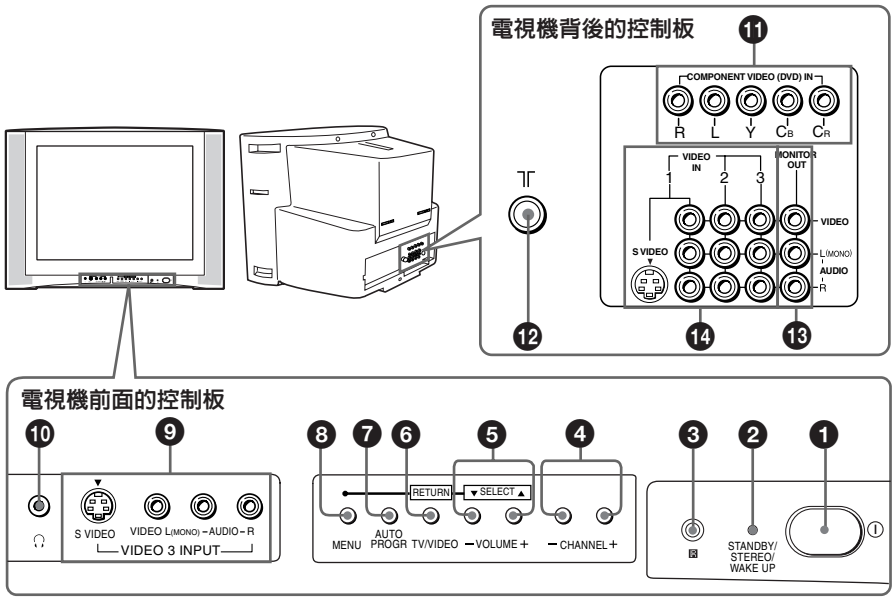
若要“原始設定”選單再次顯示在畫面上，選擇“是”，然後按壓 ⊕ 鍵。



提示

- 您可按壓 MENU（目錄）鍵直接進入“原始設定”選單最後的設定項目。
- 您也可使用選單系統設定您的電視機（參考第 15 頁）。

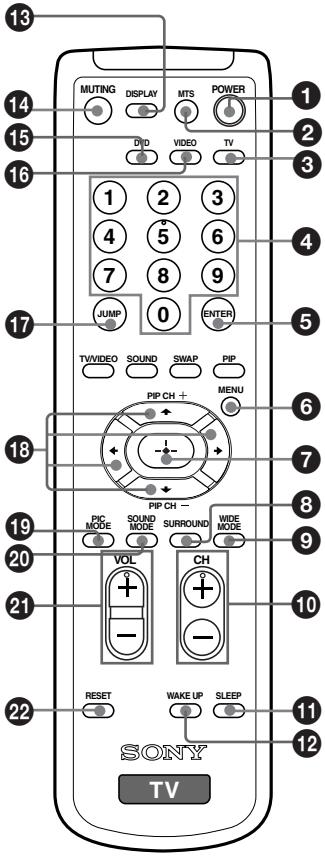
■ 電視機前面和背後的控制板



按鍵 / 端子	功能	頁面
❶ ①（電源）	打開或關閉電視機。	6
❷ STANDBY（待機）	待機指示燈。	–
❷ WAKE UP（開機定時）	開機指示燈。	13
❷ STEREO （立體聲）	立體聲／雙語言指示燈。	14
❸ R	遙控傳感器。	–
❹ CHANNEL +/–（頻道）	選擇頻道號碼。	–
❺ VOLUME +/–（音量）	調整音量。	–
❻ TV/VIDEO（電視 / 影音）	選擇電視或影音輸入。	–
❼ AUTO PROGR（自動頻道記憶）	自動預設頻道。	–
目錄操作		
❺ SELECT ▼/▲（功能選擇）	選擇和調整項目。	17
❻ RETURN（輸入）	確認被選項目。	17
❽ MENU（目錄）	顯示或取消選單。	17
❾ VIDEO 3 INPUT（影音 3 輸入）	影音輸入端子 3。	25
❿ ∩	耳機插口。	–
⓫ COMPONENT VIDEO (DVD) IN （聲音 / 色差端子 (DVD) 輸入）	聲音 / 色差 (DVD) 輸入端子。	26
⓬ ⅂[	天線輸入端子。	25
⓭ MONITOR OUT （監視器輸出）	監視器輸出端子。	25
⓮ VIDEO IN 1,2,3 （影音輸入）	影音輸入端子 1，2，3。	25

■ 遙控器

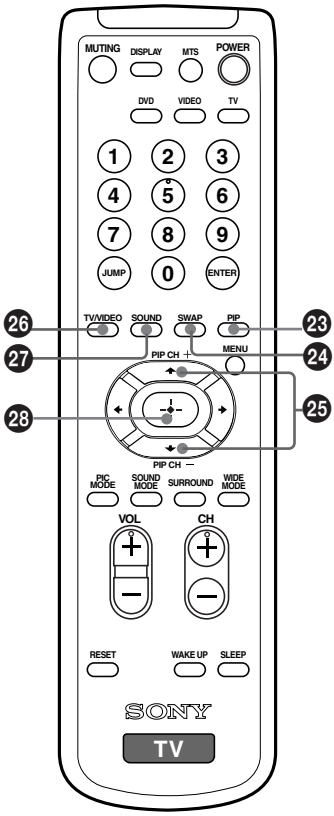
若您喜愛中文標記，請拉開標籤（提供）的背後，然後將其貼在遙控器上。



按鍵	功能	頁面
❶ POWER（電源）	打開或暫時關閉電視機。	–
❷ MTS（音聲多重）	選擇立體聲或雙語言模式。	14
❸ TV（電視）	顯示電視頻道。	–
❹ 0 – 9	輸入數字鍵。	–
❺ ENTER（頻道輸入）	確認所選的頻道。	–
❽ SURROUND（環繞音效）	選擇環繞聲模式。	12
❾ WIDE MODE（寬螢幕模式）	選擇 16:9 寬螢幕模式。	12
❿ CH +/–（頻道）	選擇頻道號碼。	–
⓭ DISPLAY（顯示）	顯示畫面上的信息。	–
⓮ MUTING（靜音）	消除聲音。	–
⓯ DVD	顯示聲音 / 色差端子 (DVD) 輸入。	26
⓰ VIDEO（影音）	選擇電視或影音輸入。	25
⓱ JUMP（回復）	跳回到之前的頻道號碼。	–
⓳ PIC MODE（畫質模式）	選擇畫質模式。	11
⓴ SOUND MODE（音效模式）	選擇音效模式。	11
㉑ VOL +/–（音量）	調整音量。	–
㉒ RESET（重新設定）	使電視機回復工廠設定。	27
定時器操作		
⓫ SLEEP（睡眠定時）	設定電視自動關閉。	13
⓬ WAKE UP（開機定時）	設定電視自動打開。	13
目錄操作		
❻ MENU（目錄）	顯示選單。	17
❼ ⊕	確認被選項目。	17
⓲ ↑, ↓, ←, →	選擇和調整項目。	17

續

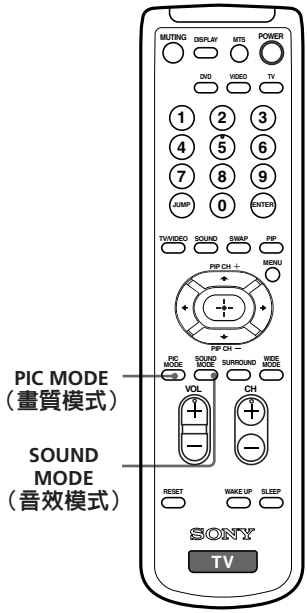
續



按鍵	功能	頁面
子母畫面操作（黃色標記）		
㉓ PIP（子母畫面）	本電視機無此操作。	_
㉔ SWAP（畫面切換）		
㉕ PIP CH +/–（子畫面頻道 +/–）		
㉖ TV/VIDEO（電視 / 影音）		
㉗ SOUND（聲音）		
㉘ ⊕		

■ 選擇畫質和音效模式

您可選擇畫質和音效模式並使用“個人”模式來調整您所偏好的設定。



選擇畫質模式

按壓 PIC MODE（畫質模式）鍵直到您所要的畫質模式被選定。

選擇	以
“動態”	觀看對比度強的圖像。
“標準”	觀看普通的圖像。
“柔和”	觀看柔和的圖像。
“個人”	接收“畫面設定”選單中的“設定”項目所調整的最終圖像設定（參考第 19 頁）。

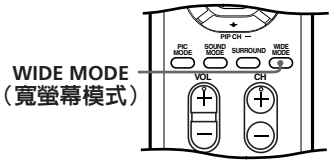
選擇音效模式

按壓 SOUND MODE（音效模式）鍵直到您所要的音效模式被選定。

選擇	以
“♪ 動態”	收聽強調低音和高音的動態範圍寬而清晰的音響。
“♪ 戲劇”	收聽強調人聲和高音調的聲音。
“♪ 柔和”	收聽柔和的聲音。
“♪ 個人”	接收在“聲音設定”選單中的“設定”項目所調整的最終聲音設定（參考第 21 頁）。

■ 觀看寬螢幕模式的圖像

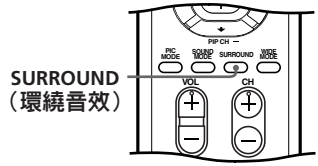
當接收 16:9 寬螢幕模式信號時，“压缩”的圖像將會顯示在畫面上。您可使用 WIDE MODE（寬螢幕模式）鍵以觀看最佳效果的圖像。



選擇	以
“開”	觀看 16:9 寬螢幕模式的圖像。
“關”	取消 16:9 寬螢幕模式。

■ 收聽環繞音效

您可使用 SURROUND（環繞音效）鍵以收聽音樂廳或電影院的音響效果。



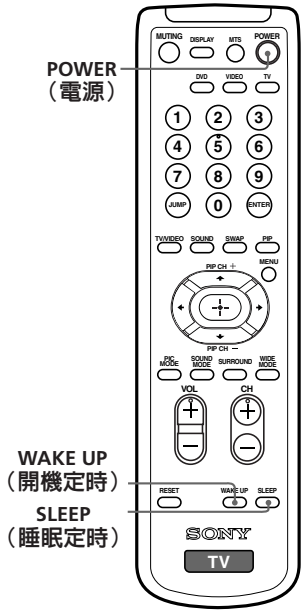
選擇	以
“TruSurround”	收聽傳遍整個房間的環繞音效。
“模擬立體音效”	收聽模擬立體聲的單聲道音響。
“關”	取消環繞音效。

您的電視機的環繞音效是屬於 TruSurround 的音響效果。

TruSurround™ 是 SRS Labs, Inc. 的注冊商標。SRS 及 SRS 的標識是 SRS Labs, Inc. 在美國及一些經特選的外國注冊登記過的商標。SRS 及 TruSurround 科技是登記在 SRS Labs, Inc. 特許證下，並受到美國專利號碼 4,748,669 和 4,841,572, 以及許多補充發佈的和正待發佈的外國專利保護。

■ 設置定時器

您可分別使用開機和睡眠定時器以設定您的電視機自動打開及自動關閉。



設定開機定時器

1 **按壓 WAKE UP（開機定時）鍵直到您所指定的時間顯示在畫面上。**

一旦時間被設定，開機定時器便立即啓動。

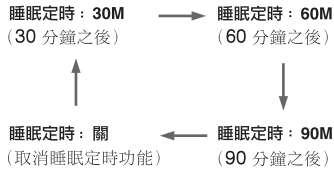
2 **請選擇當您醒來時所要觀看的頻道號碼或影音輸入。**

3 **若您要電視機自動切斷電源，請按壓 POWER 鍵或設定睡眠定時功能。**

當電視機進入待機狀態時，電視機上的 WAKE UP（開機定時）指示燈將發出橙色亮光。

設定睡眠定時器

按壓 SLEEP（睡眠定時）鍵直到您所指定的時間顯示在畫面上。



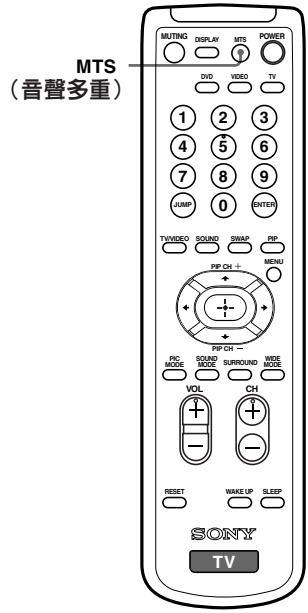
一旦時間被設定，睡眠定時器便立即啓動。

注

- 您可按壓電視機上的 ⏻ 切斷電視機電源以取消開機和睡眠定時功能。
- 用開機定時器接通電視機電源並超過兩小時後，若您不按壓電視機或遙控器上的任何一個按鍵或控制鍵，則電視機再進入待機狀態。

■ 欣賞立體聲或雙語言節目

您可使用 MTS（音聲多重）鍵以欣賞 MTS（音聲多重）立體聲制式的立體聲或雙語言節目。



選擇立體聲或雙語言節目

按壓 MTS（音聲多重）鍵至接收到您所想收聽的聲音。

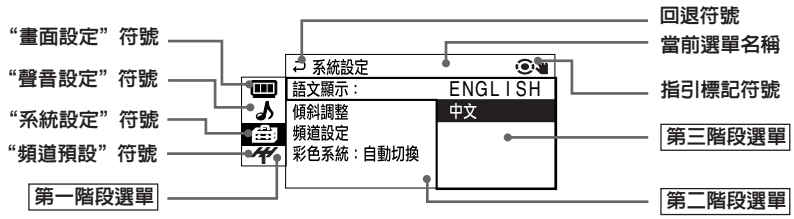
選擇	以
“立體聲”	收聽立體聲。
“副語音”	收聽雙語言節目。
“單聲道”	接收單聲道的聲音。

注

- 當選擇“副語音”時，非副語音節目的聲音將會與立體聲相似。
- 當信號微弱時，“副語音”或“立體聲”的聲音可能會不正常。要改善聲音，選擇“單聲道”。

■ 介紹選單系統

MENU（目錄）鍵能讓您顯示選單和調整電視上的設定。以下是選單系統的總概況。



第一階段	第二階段	第三階段 / 功能	頁面
“畫面設定”	“畫質模式”	選擇圖像模式： “動態” → “標準” → “柔和” → “個人” → “設定”	18
	“個人設定”	調整“個人”項目： “對比” → “彩色” → “亮度” → “色相” → “銳度”	
	“寬螢幕模式”	改變圖像的尺寸： “開” → “關”	
	“智慧型畫質設定”	接收最理想的畫面效果： “開” → “關”	
“聲音設定”	“音效模式”	選擇聲音模式： “動態” → “戲劇” → “柔和” → “個人” → “設定”	20
	“個人設定”	調整“個人”項目： “低音” → “高音” → “平衡” → “BBE” *	
	“環繞音效”	選擇環繞音效模式： “TruSurround” → “模擬立體音效” → “關”	
	“智慧型音量設定”	自動調整音量： “開” → “關”	

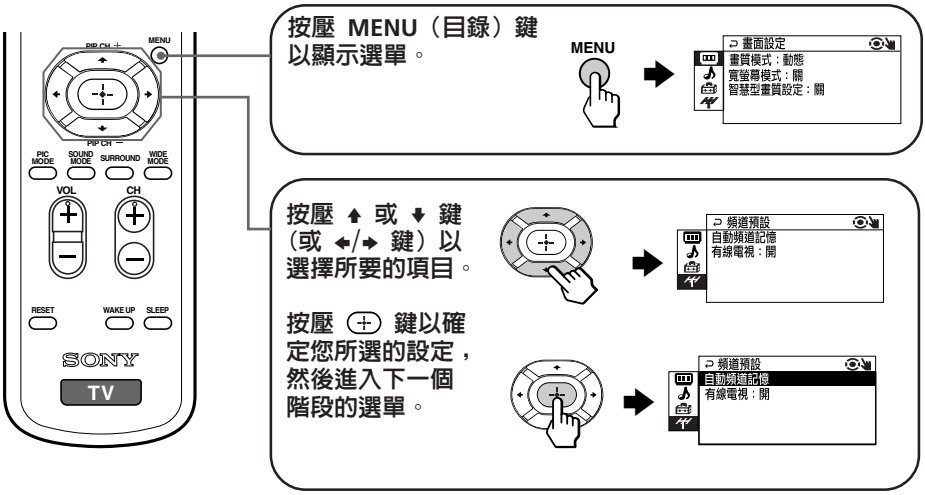
續

續

第一階段	第二階段	第三階段 / 功能	頁面
“系統設定”	“語文顯示/ LANGUAGE”	改變選單語文顯示： “ENGLISH”（英文）→“中文”	22
	“傾斜調整”	調整圖像位置。	
	“頻道設定”	調整個別頻道號碼的設定。	
	“彩色系統”	選擇彩色系統（僅於影音輸入）： “自動切換”→“PAL”→ “SECAM”→ “NTSC3.58”→“NTSC4.43”	
“頻道預設”	“自動頻道記憶”	自動預設頻道。	24
	“有線電視”	收看有線電視節目： “開”→“關”	

* BBE 是 Sony 公司經 BBE 音響公司獲准後生產的並應用了美國專利號碼 No. 4,638,258 和 No. 4,482,866。“BBE”這詞與 BBE 這符號是 BBE 音響公司的注冊商標。

如何使用選單



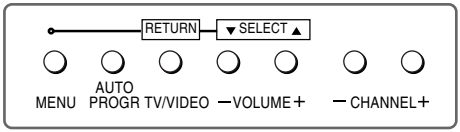
其它選單操作

要	按壓
調整設定值	↑,↓,← 或 → 鍵。
回到之前或進入下一個階段的選單	← 或 → 鍵。
取消選單	MENU（目錄）鍵。

提示

- 要從第二階段選單回到第一階段選單時，則請按壓 ↑ 或 ↓ 鍵直到回退符號（⮌）被選中，然後按壓 ⊕ 鍵。
- 您也可使用遙控器的按鍵以直接操作選單上的某些項目。
- 電視機上的 MENU（目錄）鍵 、 RETURN（輸入）鍵和 SELECT ▼/▲（功能選擇）鍵也可同時用於上述操作。

電視機前面

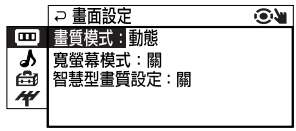


■ 調整“畫面設定”

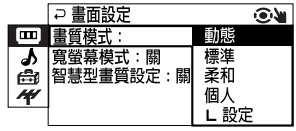
“畫面設定”選單可使您調整畫面設定。

1 **按壓 MENU（目錄）鍵。**

2 **確認“畫面設定”符號（▣）已被選擇，然後按壓 ⊕ 鍵。**



3 **按壓 ▲ 或 ▼ 鍵以選擇所要的項目（例如，“畫質模式”），然後按壓 ⊕ 鍵。**



選擇	以
“畫質模式”	選擇“動態”、“標準”、“柔和”、“個人”* 或“設定”（參考第 11 頁）。
“寬螢幕模式”	選擇“開”或“關”（參考第 12 頁）。
“智慧型畫質設定”	接收最理想的畫面效果。 按壓 ▲ 或 ▼ 鍵以選擇“開”，然後按壓 ⊕ 鍵。 要取消時，選擇“關”然後按壓 ⊕ 鍵。

* 當選擇“個人”模式時，您可接收到最後一次在“設定”模式中所調整的圖像設定（參考第 19 頁）。

調整“畫質模式”下的“設定”項目（“個人設定”）

1 **按壓 ↑ 或 ↓ 鍵以選擇所要的項目（例如，“彩色”），然後按壓 ⊕ 鍵。**

2 **按照下表調整項目值，然後按壓 ⊕ 鍵。**

項目	按壓 ↓ 或 ← 鍵以	按壓 ↑ 或 → 鍵以
“對比”	降低圖像對比度。	提高圖像對比度。
“彩色”	減低彩色濃度。	增加彩色濃度。
“亮度”	降低圖像亮度。	提高圖像亮度。
“色相”	使圖像色調增強紅色。	使圖像色調增強綠色。
“銳度”	使圖像柔和。	使圖像鮮明。

3 **重復上述步驟以調整其它項目。**

當選擇“個人”項目時，您可接收已被調整的設定。

注

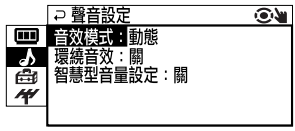
- 只有當彩色系統爲 NTSC 時，您才能調整“色相”設定。
- 您也可減少“銳度”以降低圖像噪聲。

■ 調整“聲音設定”

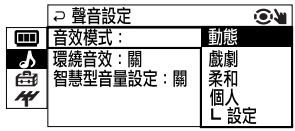
“聲音設定”選單可使您調整聲音設定。

1 **按壓 MENU（目錄）鍵。**

2 **按壓 ▲ 或 ▼ 鍵以選擇“聲音設定”符號（♪），然後按壓 ⊕ 鍵。**



3 **按壓 ▲ 或 ▼ 鍵以選擇所要的項目（例如，“音效模式”），然後按壓 ⊕ 鍵。**

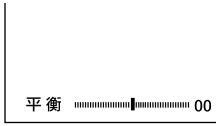


選擇	以
“音效模式”	選擇“動態”、“戲劇”、“柔和”、“個人”* 或“設定”（參考第 11 頁）。
“環繞音效”	選擇“TruSurround”，“模擬立體音效” 或“關”（參考第 12 頁）。
“智慧型音量設定”	自動調整所有頻道號碼和影音輸入的音量。 按壓 ▲ 或 ▼ 鍵以選擇“開”，然後按壓 ⊕ 鍵。 要取消時，選擇“關”，然後按壓 ⊕ 鍵。

* 當選擇“個人”模式時，您可接收到最後一次在“個人設定”模式中所調整的聲音設定（參考第 21 頁）。

調整“音效模式”下的“設定”項目（“個人設定”）

1 **按壓 ↑ 或 ↓ 鍵以選擇所要的項目（例如，“平衡”），然後按壓 ⊕ 鍵。**



2 **按照下表調整項目值，然後按壓 ⊕ 鍵。**

項目	按壓 ↓ 或 ← 鍵以	按壓 ↑ 或 → 鍵以
“低音”	減弱低音。	增強低音。
“高音”	減弱高音。	增強高音。
“平衡”	提高左揚聲器的音量。	提高右揚聲器的音量。
“BBE”	選擇“強”以強調較高的聲音清純度； 選擇“弱”以強調較低的聲音清純度； 選擇“關”以取消 BBE 功能。	

3 **重復上述步驟以調整其它項目。**
當選擇“個人”項目時，您可接收已被調整的設定。

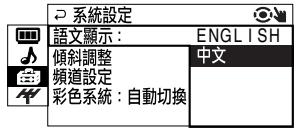
■ 調整“系統設定”選單

“系統設定”選單可使您更換選單語言，調整圖像位置，調整頻道號碼以及選擇彩色系統。

1 **按壓 MENU（目錄）鍵。**

2 **按壓 ↑ 或 ↓ 鍵以選擇“系統設定”符號（🧰），然後按壓 ⊕ 鍵。**

3 **按壓 ↑ 或 ↓ 鍵以選擇所要的項目（例如，“語文顯示／LANGUAGE”），然後按壓 ⊕ 鍵。**

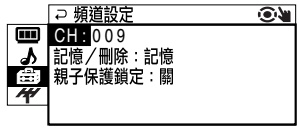


選擇	以
“語文顯示/LANGUAGE”	更換選單語言。 按壓 ↑ 或 ↓ 鍵以選擇“ENGLISH”（英文）或“中文”，然後按壓 ⊕ 鍵。 被選擇的選單語言將顯示在畫面上。
“傾斜調整”	調整電視上傾斜的圖像。 按壓 ↑,→,↓ 或 ← 鍵以調整圖像位置，然後按壓 ⊕ 鍵。
“頻道設定”	調整個別頻道號碼的設定（參考第 23 頁的**調整個別頻道號碼的設定（“頻道設定”）**）。
“彩色系統”	更換彩色系統 （僅於影音輸入）。 按壓 ↑ 或 ↓ 鍵以選擇適當的彩色系統，然後按壓 ⊕ 鍵。 通常將此設定爲“自動切換”。

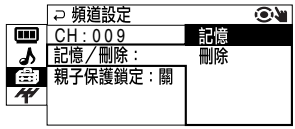
調整個別頻道號碼的設定（“頻道設定”）

1 **選擇“系統設定”選單中的“頻道設定”。**

2 **按壓“CH”後再按壓 ⊕ 鍵。**
按壓 ▲ 或 ▼ 鍵以選擇您所要調整的頻道號碼，然後按壓 ⊕ 鍵。



3 **按壓 ▲ 或 ▼ 鍵以選擇您所要的項目，(例如，“記憶／刪除”)，然後按壓 ⊕ 鍵。**



選擇	以
“CH”	選擇您所要的頻道號碼。
“記憶／刪除”	手動預設頻道。 按壓 ▲ 或 ▼ 鍵以選擇“記憶”，然後按壓 ⊕ 鍵。 若要略掉不用或不要的頻道，選擇“刪除”，然後按壓 ⊕ 鍵。
“親子保護鎖定”	避免小孩觀看某些頻道號碼。 按壓 ▲ 或 ▼ 鍵以選擇“開”，然後按壓 ⊕ 鍵。 親子保護鎖定符號（🔒）即顯示在畫面上。 要取消時，選擇“關”，然後按壓 ⊕ 鍵。 若您預設任何一個鎖定頻道號碼，此頻道號碼將自動解鎖。

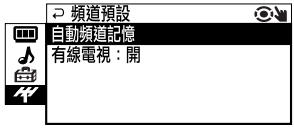
4 **若要繼續調整其它頻道號碼，按壓 ▲ 或 ▼ 鍵以選擇“CH”，然後重復第 2 和第 3 步驟。**

■ 調整“頻道預設”設定

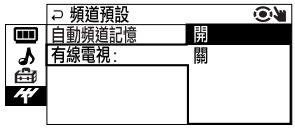
“頻道預設”選單可使您調整電視機的設定，以接收有線電視或 VHF/UHF 廣播頻道。

1 **按壓 MENU（目錄）鍵。**

2 **按壓 ▲ 或 ▼ 鍵以選擇“頻道預設”符號（），然後按壓 ⊕ 鍵。**



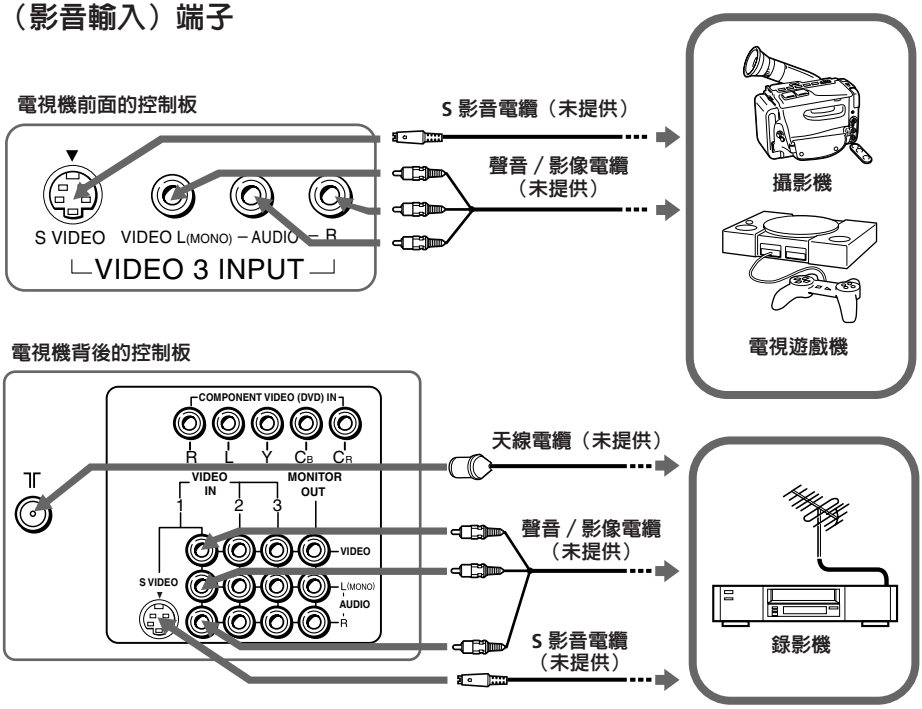
3 **按壓 ▲ 或 ▼ 鍵以選擇所要的項目（例如，“有線電視”），然後按壓 ⊕ 鍵。**



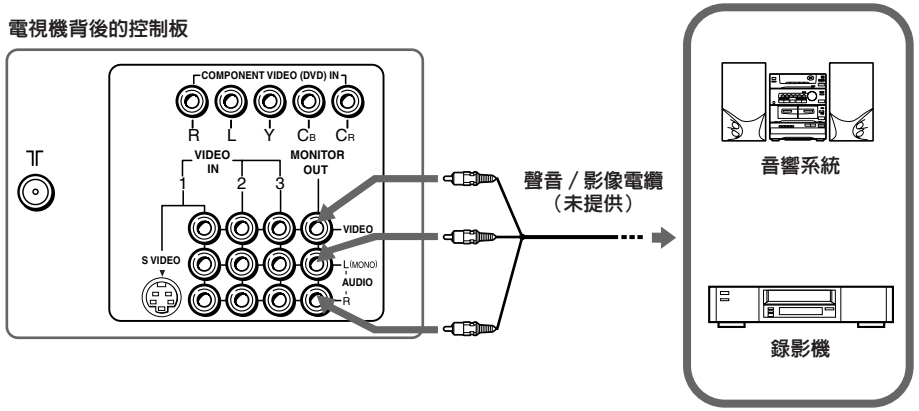
選擇	以
“自動頻道記憶”	自動預設頻道。
“有線電視”	接收有線電視節目。 按壓 ▲ 或 ▼ 鍵以選擇“開”，然後按壓 ⊕ 鍵。 若您選擇“有線電視：開”，您將會接收到 125 個有線電視頻道。 若沒有有線電視頻道，您將會接收到 VHF 的廣播頻道而已。 若只想接收 VHF/UHF 廣播頻道，選擇“關”，然後按壓 ⊕ 鍵。

■ 連接選購的裝置

連接至 VIDEO 3 INPUT（影音 3 輸入）端子和 VIDEO IN 1, 2 或 3（影音輸入）端子



連接至 MONITOR OUT（監視器輸出）端子



續

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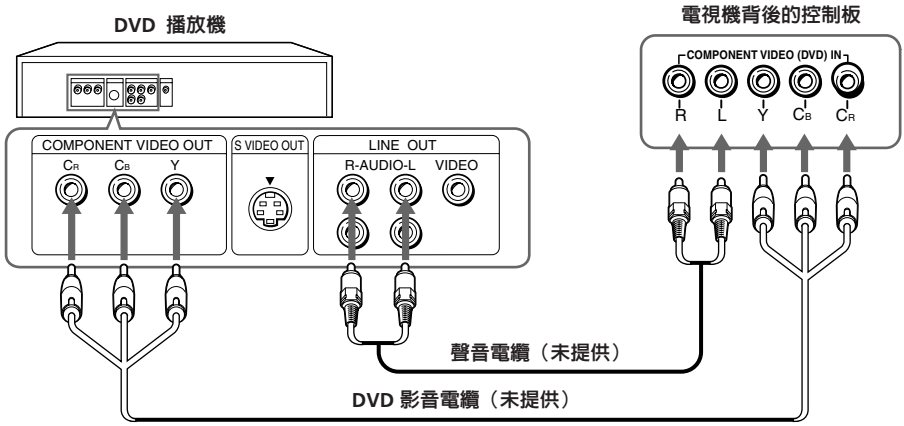
用 COMPONENT VIDEO（DVD）IN（聲音／色差端子（DVD）輸入）端子與 DVD 播放機相連接

1 將電視機上的 COMPONENT VIDEO（DVD）IN（聲音／色差端子（DVD）輸入）R（右）和 L（左）與 DVD 播放機上的 LINE OUT（線路輸出）的 AUDIO（聲音）R（右）和 L（左）輸出插口連接起來。

2 用 DVD 影音電纜將電視機上的 COMPONENT VIDEO（DVD）IN（聲音／色差端子（DVD）輸入）Y，C_B 和 C_R 插口連接至 DVD 播放機上的 COMPONENT VIDEO OUT（DVD 影音輸出）Y，C_B 和 C_R 插口。

3 按壓遙控器上的 DVD 鍵以觀看 COMPONENT VIDEO（DVD）IN（聲音／色差端子（DVD）輸入），“DVD”也將同時顯示在畫面上。



注

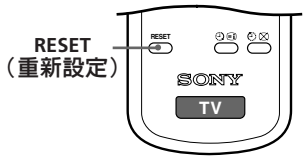
- 當連接 DVD 播放機至電視機上的 COMPONENT VIDEO (DVD) IN（聲音 / 色差端子 DVD 輸入）時，若您的 DVD 播放機可輸出隔行和逐行的掃描模式信號，則請選擇隔行掃描輸出。您的電視機可接收 525i/60 赫茲或 625i/50 赫茲的隔行掃描信號。
- 某些 DVD 播放機的插口可能標記不同：

連接	至（DVD 播放機上）
Y（綠色）	Y
C_B（藍色）	C_B, P_B, C_b 或 B-Y
C_R（紅色）	C_R, P_R, C_r 或 R-Y

- 當 S VIDEO（S 影像）和 VIDEO IN 1 （影音輸入）或 VIDEO 3 INPUT（影音 3 輸入）的 VIDEO（影像）同時被連接時，S VIDEO（S 影像）即自動被選定。要收看 VIDEO（影像）時，斷開 S 影像電纜即可。
- 若您在電視畫面上選擇“DVD”，MONITOR OUT（監視器輸出）插口將不能輸出正常的信號。這並不表示發生故障。

■ 故障檢修

若在觀看電視時遇見任何問題，您可使用重新設定功能以解決問題或參考下列故障檢修指南。若問題仍然存在，請聯絡 Sony 經銷商。

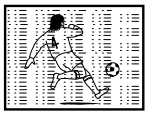


重新設定功能

按壓遙控器上的 RESET（重新設定）鍵。電視畫面即呈現空白，約半秒後，圖像將重現。“重新設定”同時會顯示在電視畫面上，十秒後“重新設定”即消失。

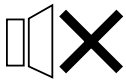
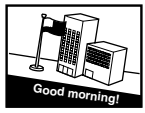
按壓 RESET 鍵使電視機恢復到工廠設定，一些電視故障可能會消失。

故障檢修指南

癥狀	可能因素	解決方法	頁面
圖像有雪花狀斑點  有噪聲 	• 連接已鬆脫或電纜已損壞。	• 檢查天線電纜以及電視機，錄影機和牆上的天線連接是否正確。	25
	• 天線裝置不正確。	• 檢查天線的裝置。請尋求 Sony 經銷商的協助。	–
	• 頻道預設不適當或不完整。	• 再次預設頻道。	24
	• 傳送信號微弱。	• 嘗試使用信號增強器。	–
圖像失真 有噪聲 	• 廣播信號太強。	• 切斷信號增強器的電源或拔掉其插頭以終止其操作。	–
沒有圖像 沒有聲音 	• 電源線、天線或錄影機沒有被連接。	• 檢查電源線，天線和錄影機之連接是否正確。	25
	• 電視機電源沒有被接通。	• 按壓 POWER（電源）鍵。 • 按壓電視機上的 ①（電源）鍵以切斷電視機的電源，五秒左右後再次接通電源。	9 8

續

續

癥狀	可能因素	解決方法	頁面
圖像良好 **沒有聲音** 	• 音量水平過低。	• 按壓 VOL +（音量）鍵以提高音量水平。	9
	• 聲音被消除。	• 按壓 MUTING（靜音）鍵以取消消音。	9
圖像有點線或條紋 	• 受周圍環境（如汽車、霓虹燈、吹風機、發電機等）影響。	• 不要在電視機旁使用吹風機或其它電器。 • 檢查天線的裝置。請尋求 Sony 經銷商的協助。	– –
圖像出現雙重影像 	• 廣播信號受周圍高山或大廈干擾。	• 使用高定向天線。	–
	• 天線裝置不正確。	• 檢查天線的裝置。請尋求 Sony 經銷商的協助。	–
	• 信號增強器的使用不適當。	• 切斷信號增強器的電源或拔掉其插頭以終止其操作。	–
圖像無彩色 	• 彩色水平設定過低。	• 顯示“畫面設定”選單，並選擇“畫質模式”裡的“設定”，然後調整“彩色”濃度。	19
	• 彩色系統設定不正確（僅於影音輸入）。	• 顯示“系統設定”選單，並檢查“彩色系統”設定（通常將此設定爲“自動切換”）。	22
	• 天線裝置不正確。	• 檢查天線的裝置。請尋求 Sony 經銷商的協助。	–
圖像傾斜 	• 受外部揚聲器或其它電器電磁性的影響，或受地球磁場方向的影響。	• 將電視機放置在離外部揚聲器或其它電器較遠的地方。 • 顯示“系統設定”選單並調整“傾斜調整”以使畫面位置調至最佳。	– 22

癥狀	可能因素	解決方法	頁面
圖像出現反常彩色斑點 	• 受外部揚聲器或其它電器電磁性的影響，或受地球磁場方向的影響。	• 將電視機放置在離外部揚聲器或其它電器較遠的地方。請勿移動已被接通電源的電視機。按壓電視機上的 ①（電源）鍵以切斷電視機電源。約 15 分鐘後再接通電視機電源。	–
立體聲廣播聲音開關失常或聲音失真。 **或**	• 立體聲接收設定不適當。	• 按壓 MTS（音聲多重）鍵直到“立體聲”顯示在畫面上。	14
	• 連接已鬆脫或電纜已損壞。	• 檢查天線電纜以及電視機，錄影機和牆上的天線連接是否正確。	25
聲音頻繁地轉換於單聲道和立體聲之間。	• 天線裝置不正確。	• 檢查天線的裝置。請尋求 Sony 經銷商的協助。	–
電視機上的 STANDBY（待機）指示燈每隔三秒閃爍至少一次的紅色亮光。	• 您的電視機的自動檢測判斷功能表明可能存在的原因。	• 計算 STANDBY（待機）指示燈的亮光次數。按壓 ①（電源）鍵以切斷電視機電源。通知您鄰近的 Sony 維修服務中心。	–
電視機外殼吱嘎聲。	• 室溫的變化有時會導致電視機的外殼膨脹或縮小，因此產生噪聲。這並不表示發生故障。	—	–
當您接通電視機時，聽到“嘣”的聲音。	• 電視機自動消磁。這並不表示發生故障。	—	–

■ 規格

	KV-AR34N90	KV-AR29N90	KV-AR25N90	注
電源	110 伏特交流電，60 赫茲			
電力消耗（瓦特）	標示於電視機後			
電視系統	M			
彩色系統	NTSC 3.58, PAL*, PAL 60*, SECAM*, NTSC 4.43*			* 僅於影音輸入
立體聲／雙語言系統	MTS（音聲多重）			
頻道範圍	VHF : 2 至 13 UHF : 14 至 69 CATV : 1 至 125			
（天線）	75 歐姆外部端子			
音頻輸出（喇叭）	8 瓦特 + 8 瓦特			
插口數量				
VIDEO（影像）	輸入：4* 輸出：1	Phono 型插口； 1 伏特峰間值，75 歐姆		* 備有三條輸入線
AUDIO（聲音）	輸入：4* 輸出：1	Phono 型插口； 500 毫伏		* 備有三條輸入線
S VIDEO（S 影像）	輸入：2	Y: 1 伏特峰間值，75 歐姆， 非平衡，負同步 C: 0.286 伏特峰間值，75 歐姆		
COMPONENT VIDEO (DVD) IN（聲音/色差端子（DVD）輸入）	輸入：1	Phono 型插口； Y: 1.0 伏特峰間值，75 歐姆，負同步 C_B : 0.7 伏特峰間值，75 歐姆 C_R : 0.7 伏特峰間值，75 歐姆 聲音：500 毫伏		
（耳機）	輸出：1	立體聲微型插口		
顯像管	34 in.	29 in.	25 in.	
顯像管對角線尺寸	859 mm	724 mm	639 mm	
可見畫面對角線尺寸	803 mm	679 mm	598 mm	
外形尺寸（寬×高×深）	896 x 686 x 569 mm	765 x 578 x 502 mm	650 x 517 x 496 mm	
重量	79 kg	49 kg	39 kg	

本機設計和規格若有任何更改，恕不另行通知。

產品名稱：	彩色電視機
型號：	KV-AR34N90 KV-AR29N90 KV-AR25N90
額定電壓：	110 伏特
額定頻率：	60 赫茲
消耗功率：	KV-AR34N90 ： 220 瓦特 KV-AR29N90 ： 180 瓦特 KV-AR25N90 ： 135 瓦特
製造日期：	如機體上標示
機器號碼：	如機體上標示
產地：	馬來西亞
製造廠商：	Sony Technology Malaysia Sdn. Bhd.
進口商：	新力索尼股份有限公司
地址：	台北市敦化南路 2 段 198 號 6 樓
服務洽詢專線：	
台北總公司：	(02)8732-8822
台中分公司：	(04)2337-5821
高雄分公司：	(07)556-2246

http://www.sony.net/
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